

1 PGFplots graph samples

1.1 from <https://tex.stackexchange.com/questions/9386/difference-between-right-of-and-right-of-in-pgf-tikz> website.

centre-to-centre placing while using `right of=` option in tikz

loooooooooooooooooooooo**node b**ooooooooong

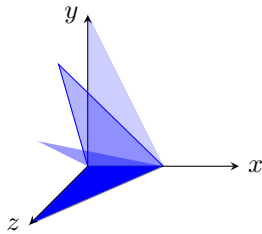
boundary-to-boundary placing while using `right=of` option in tikz

```

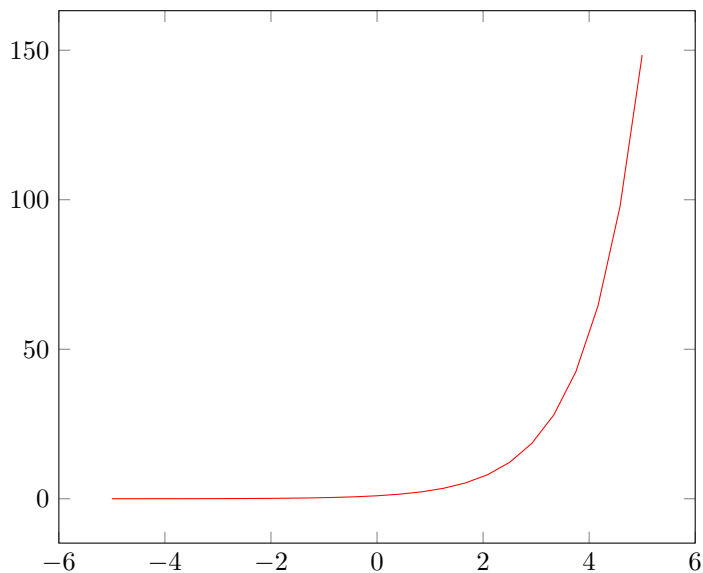
loooooooooooooooooooooooooooooooooong          node b

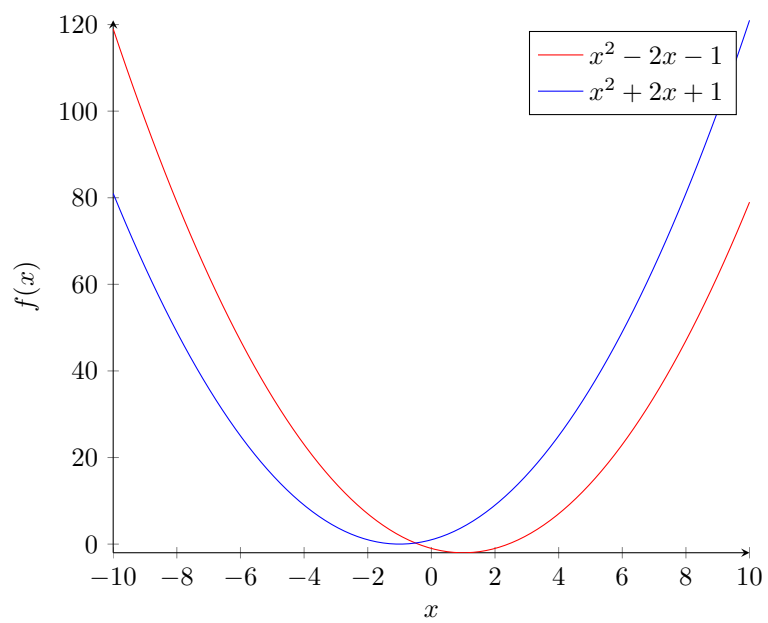
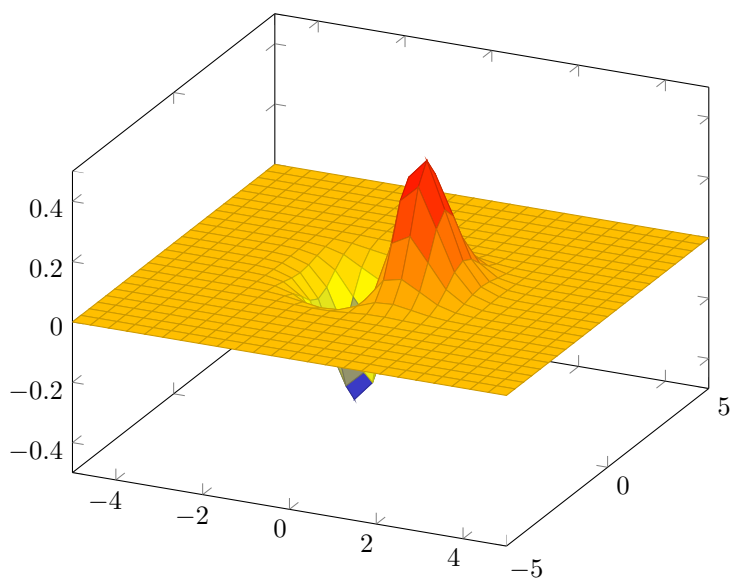
```

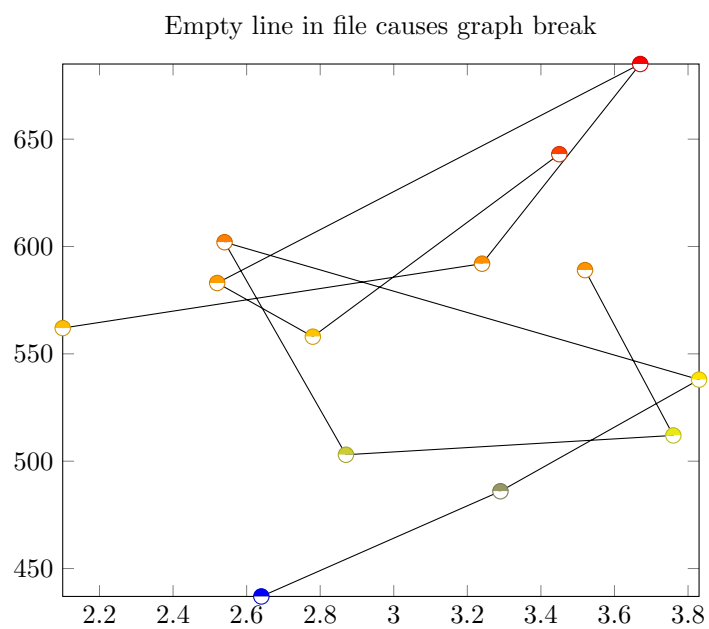
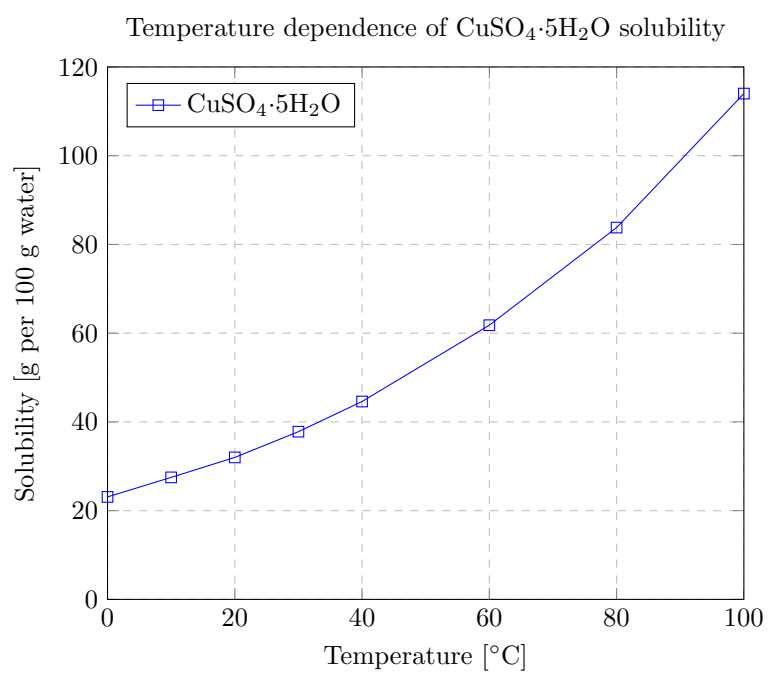
1.2 from <https://tex.stackexchange.com/questions/354401/how-to-draw-a-vector-diagram-with-tikz-datavisualization>

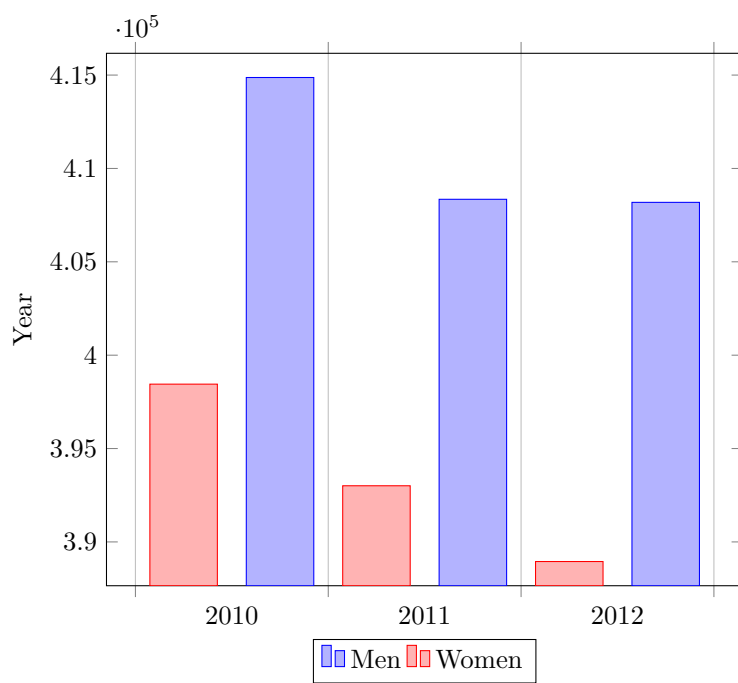


1.3 from https://www.overleaf.com/learn/latex/Pgfplots_package

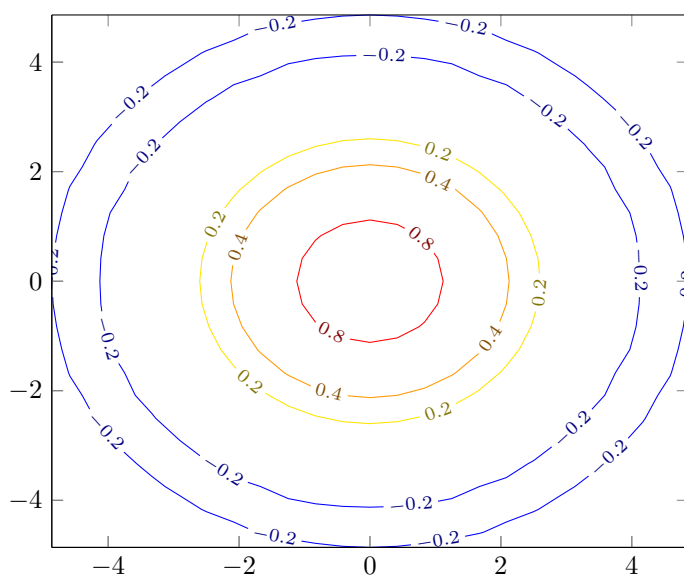


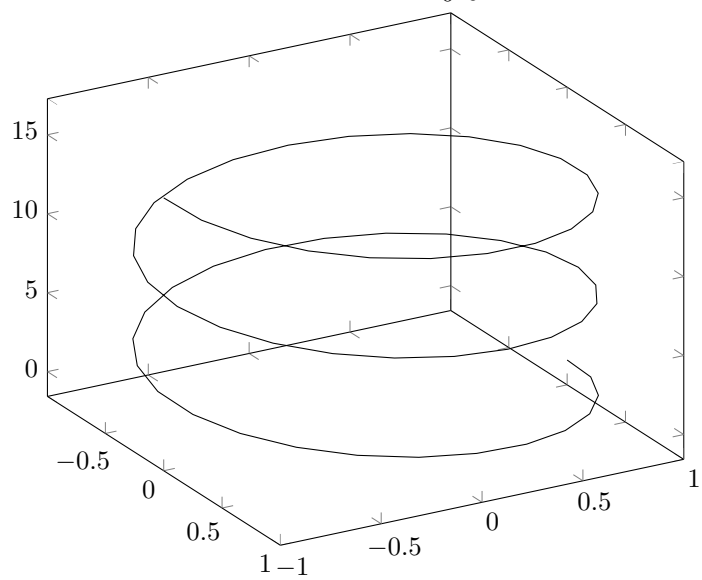
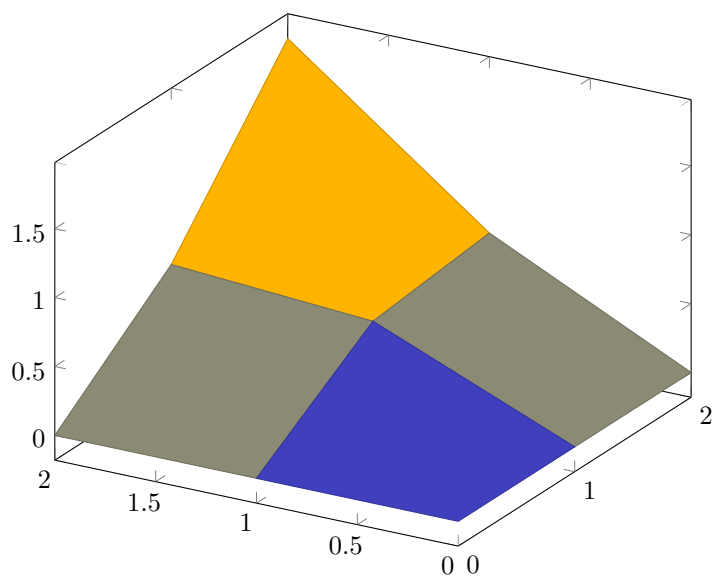






Contour plot, view from top





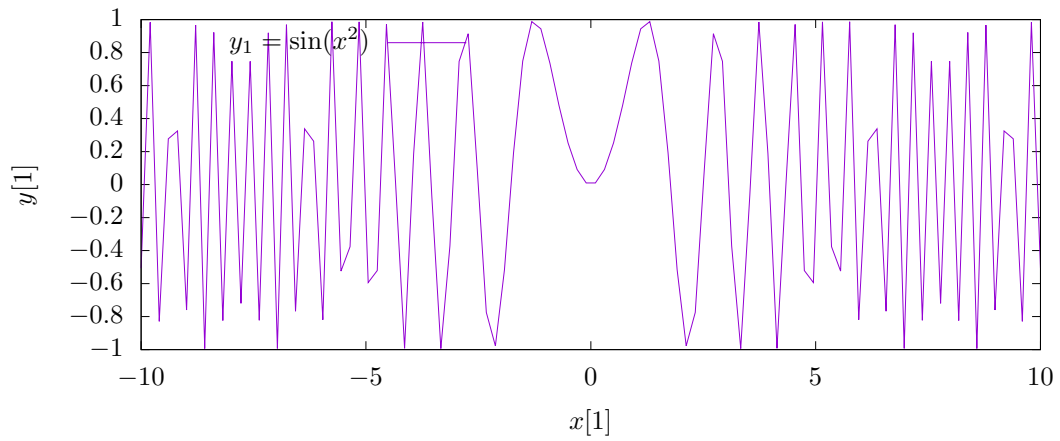
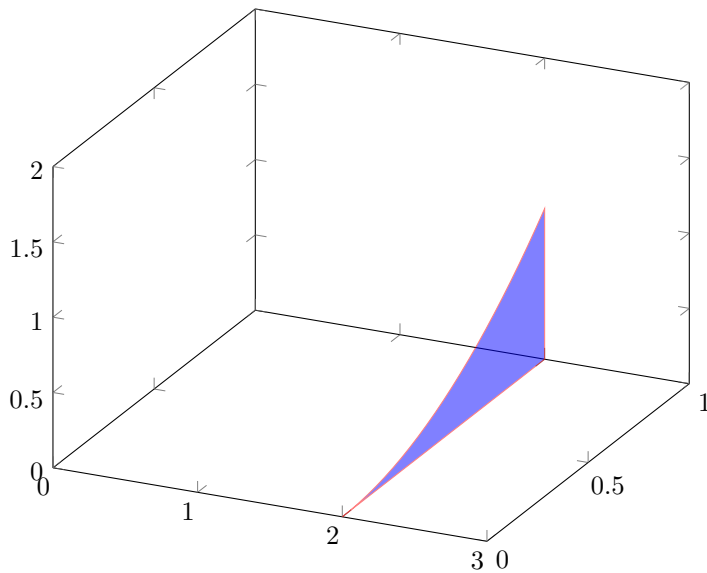
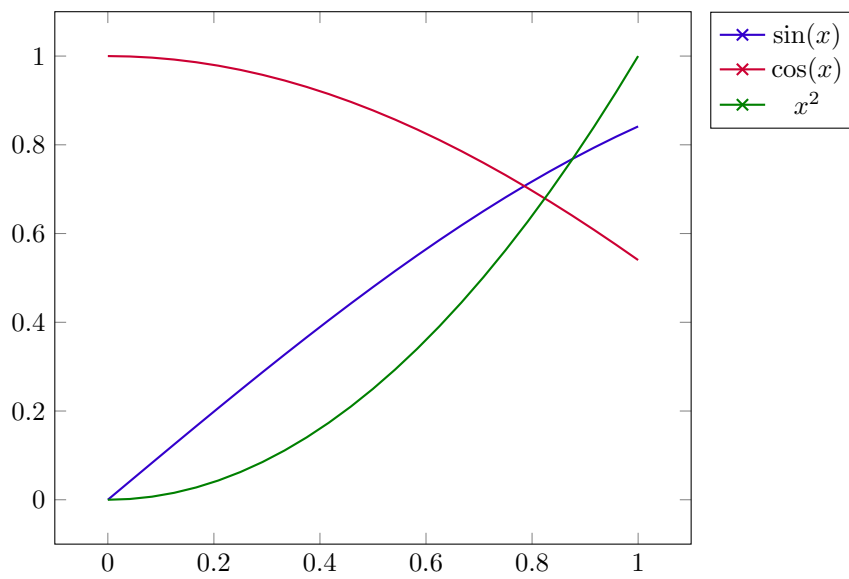


Figure 1: Plot

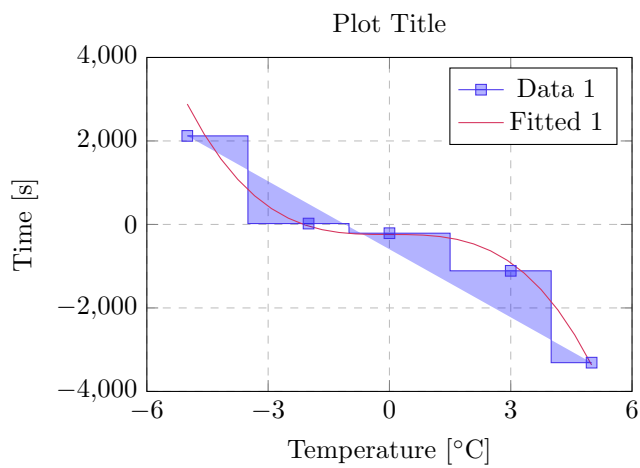
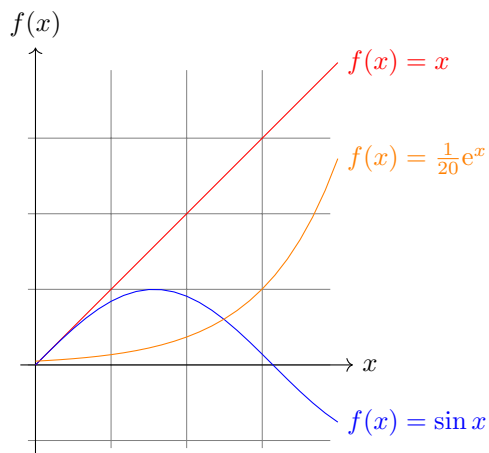
- 1.4 from <https://stackoverflow.com/questions/36386656/how-to-plot-in-latex-with-gnuplot>
- 1.5 from <https://tex.stackexchange.com/questions/136288/pgfplots-how-to-fill-area-under-a-curve-in-a-3d-plot-similar-to-closedcycle-in>



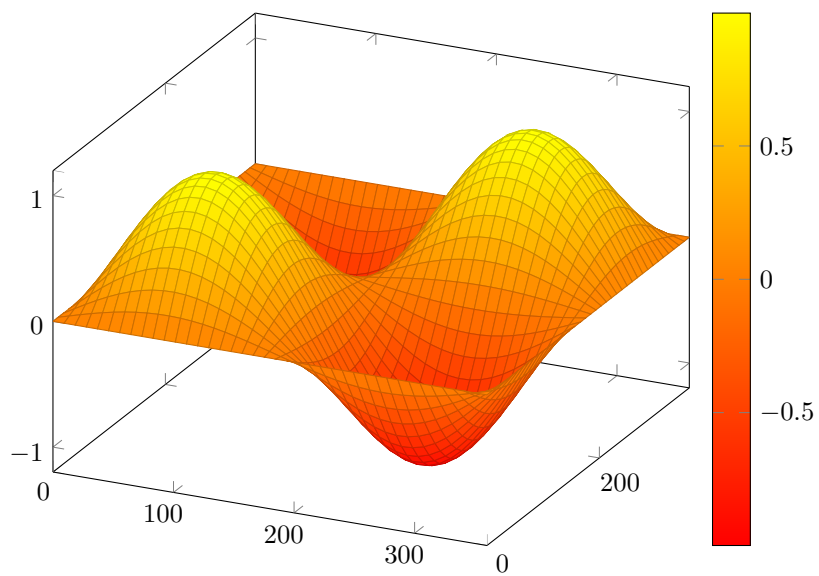
from <https://tex.stackexchange.com/questions/311161/pgfplots-shift-the-entire-axis-environment-to-the-right>



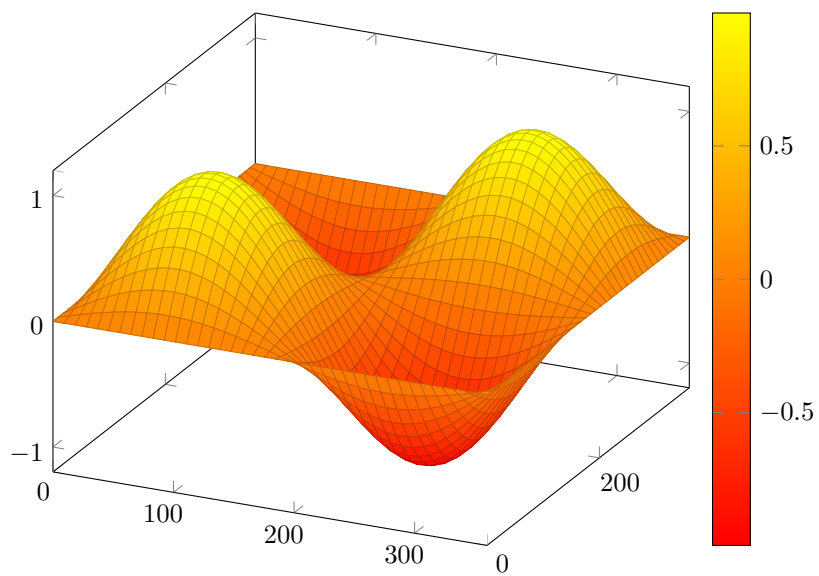
1.6 from <https://tex.stackexchange.com/questions/16232/how-to-plot-fx-sinx-kx-cosx-and-ux-x%C2%B2-with-tikz>

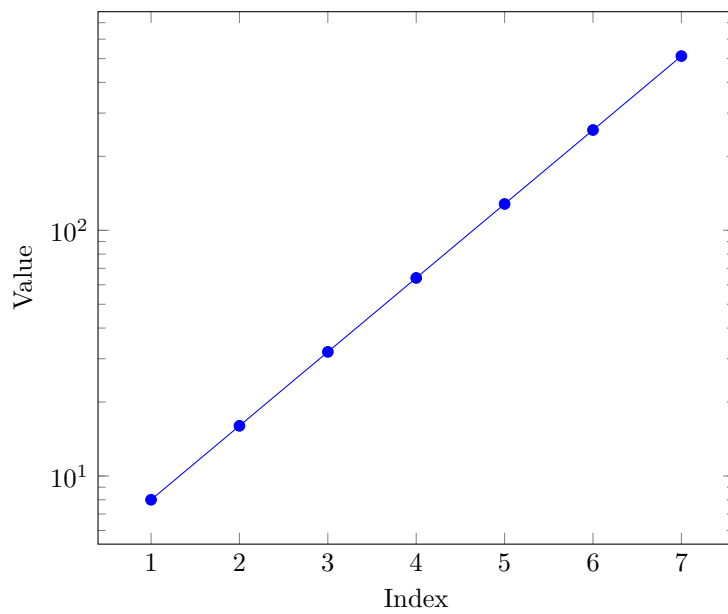


1.7 from

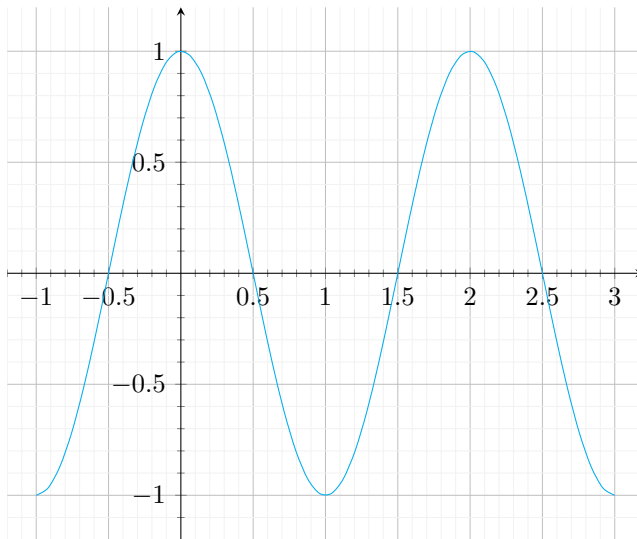


1.8 from





1.9 from <https://tex.stackexchange.com/questions/361915/tikz-or-pgfplots-plotting-a-trigonometric-function-cos-sin-tan>



1.10 <https://newbedev.com/plotting-function-2-with-pole-at-00-smoothly>

In polar coordinates,

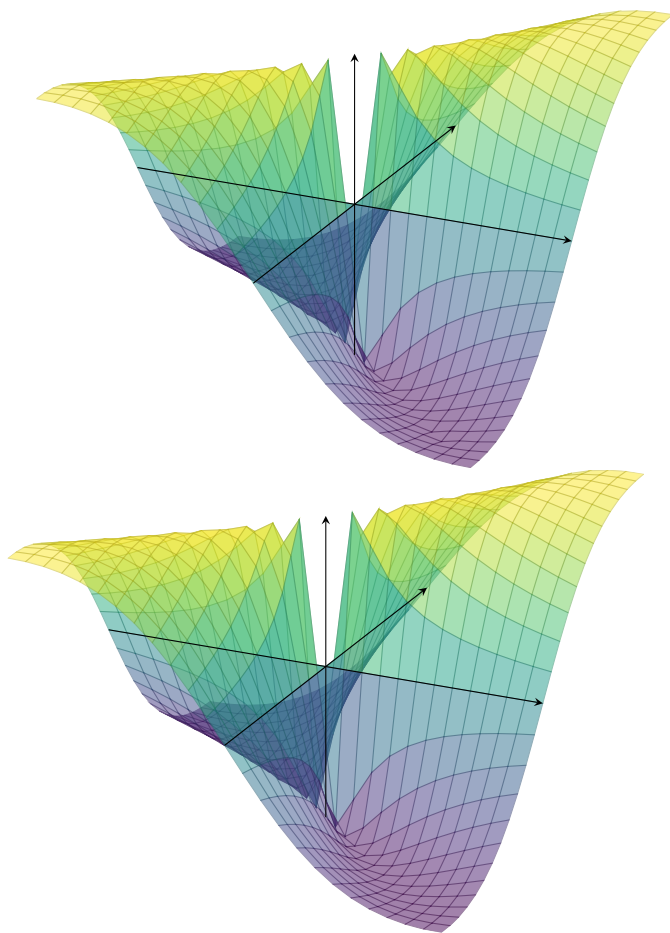
$$x = r \cos \varphi \quad \text{and} \quad y = r \sin \varphi ,$$

such that

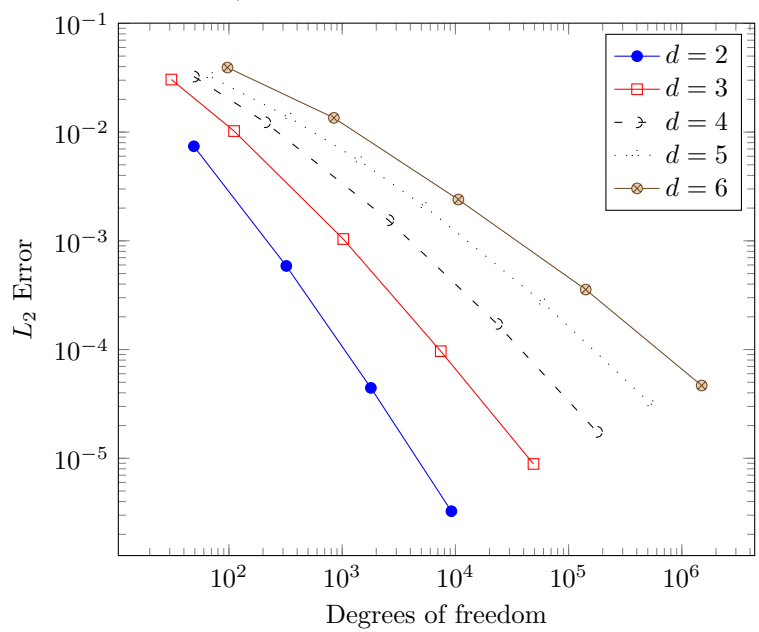
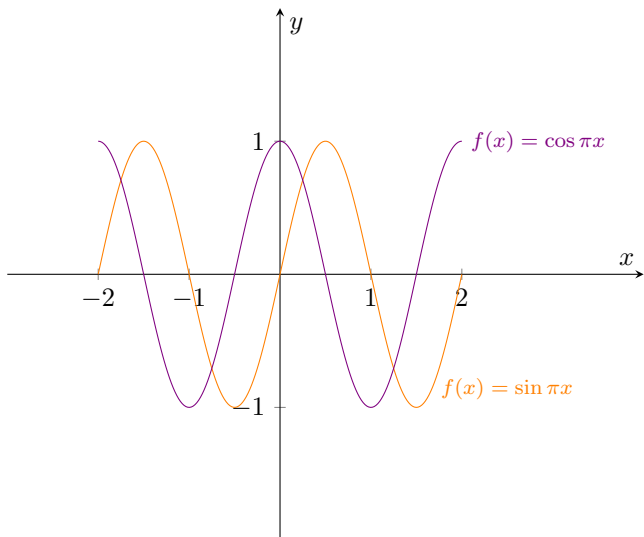
$$\frac{xy}{x^2 + y^2} = \frac{r^2 \cos \varphi \sin \varphi}{r^2} = \cos \varphi \sin \varphi$$

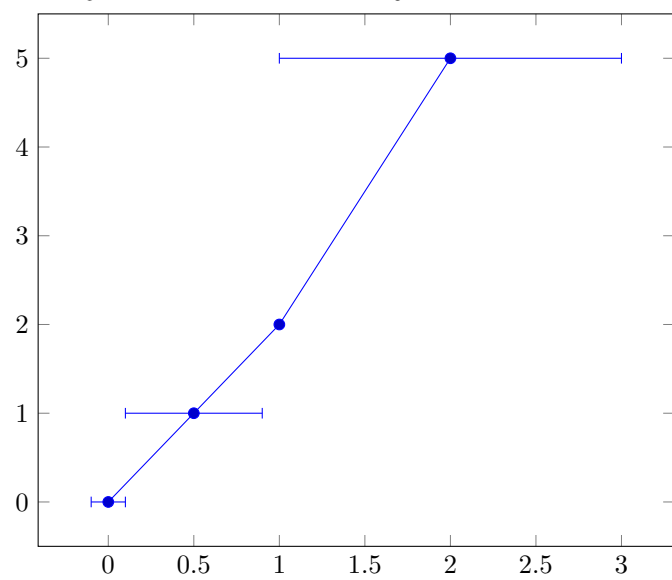
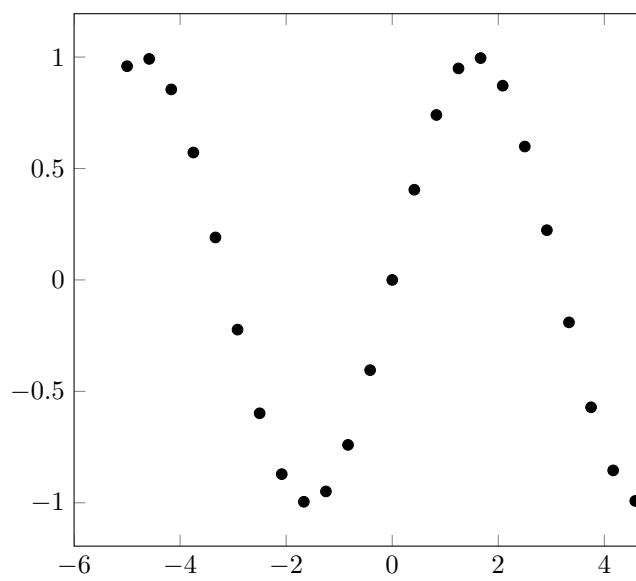
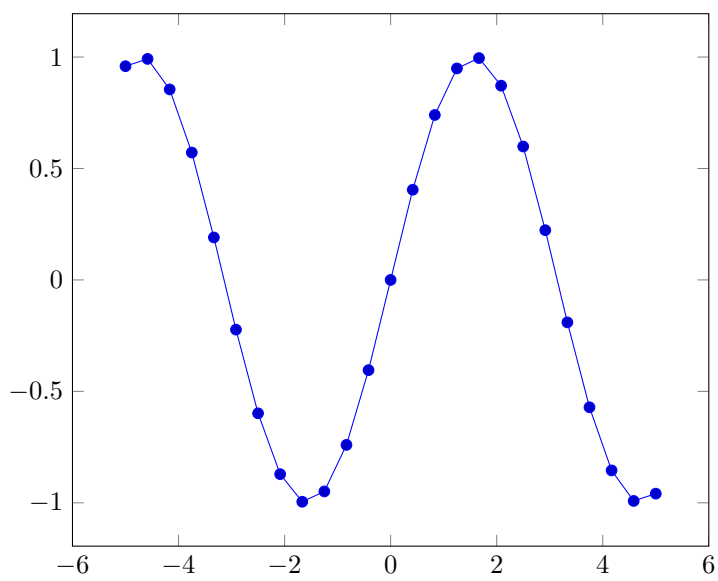
with $\varphi = \arctan(y/x)$. So we can replace

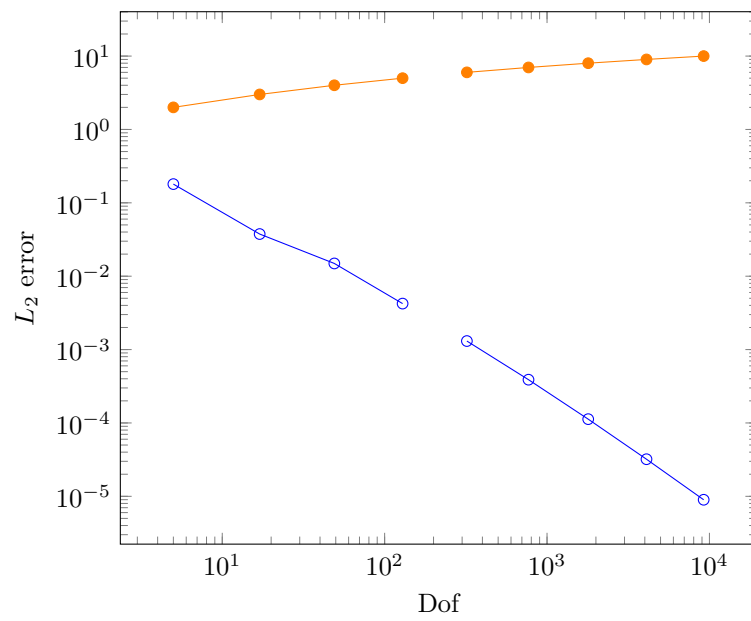
$$\frac{xy}{x^2 + y^2} \rightarrow \sin(2 \arctan(y/x))/2 .$$



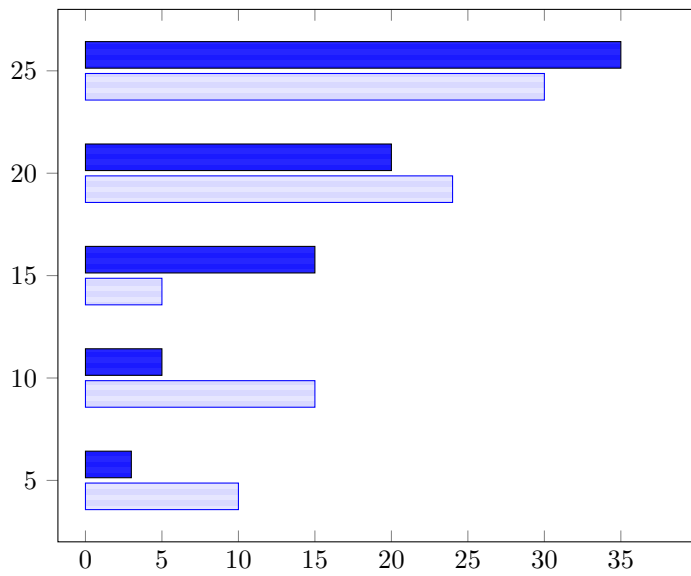
1.11 Line Plots

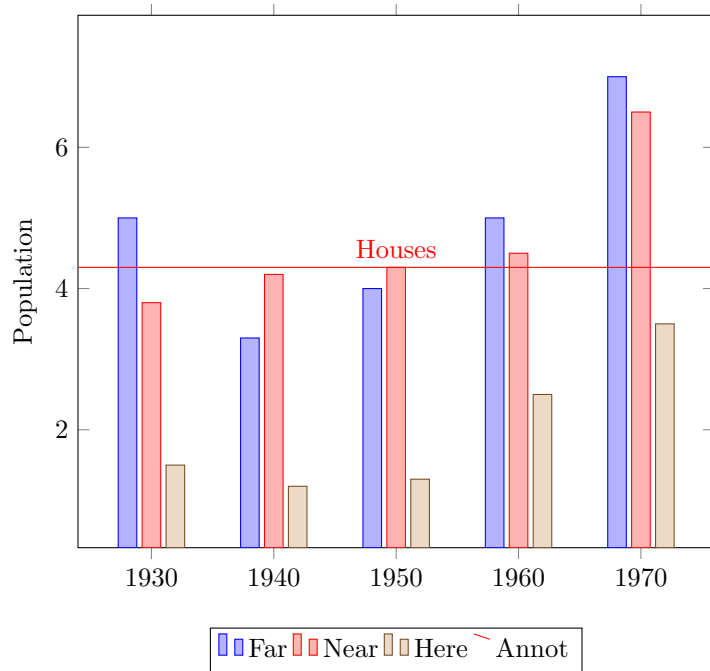
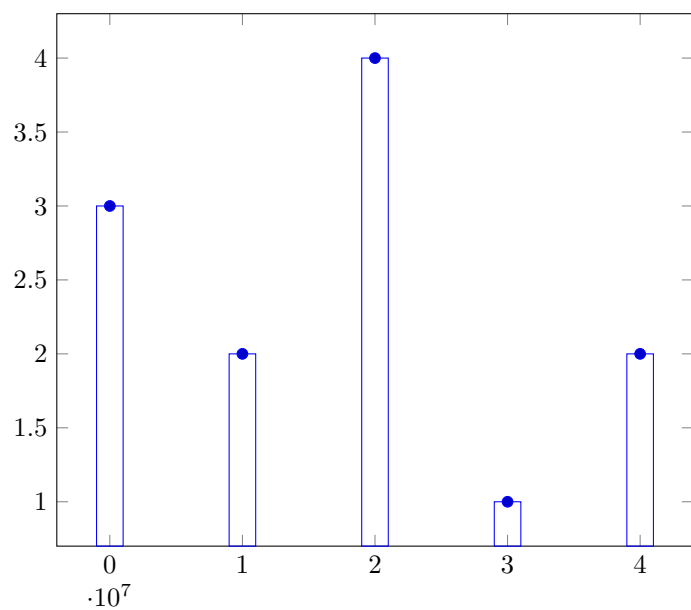


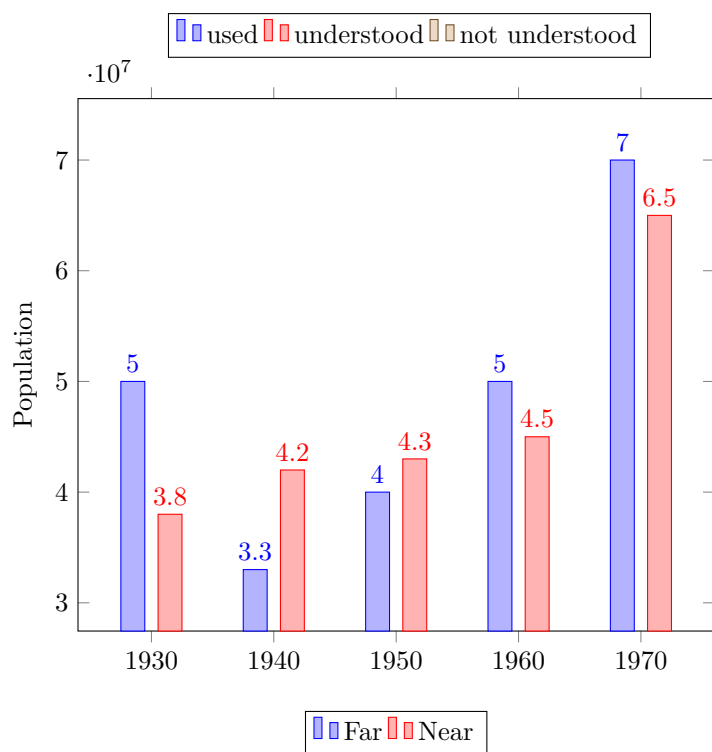
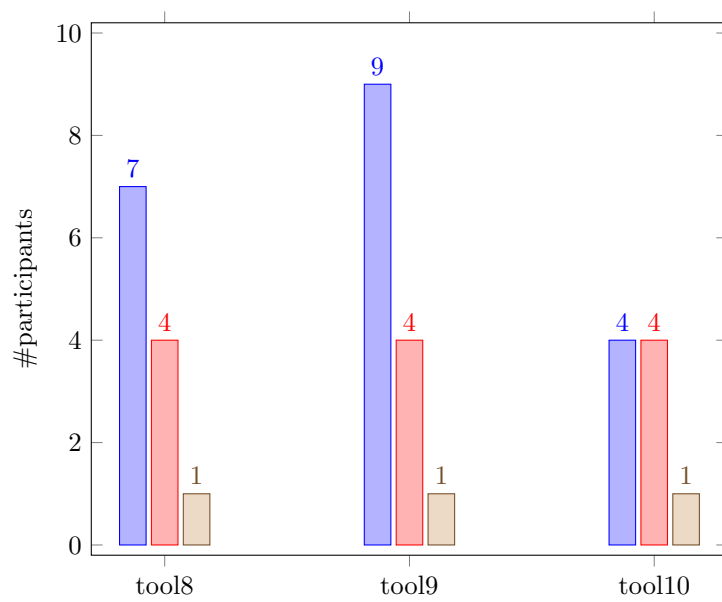


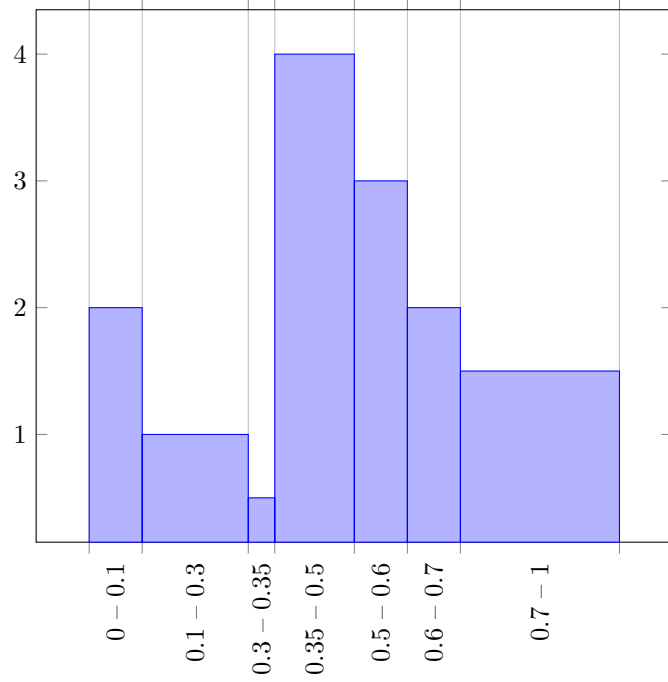
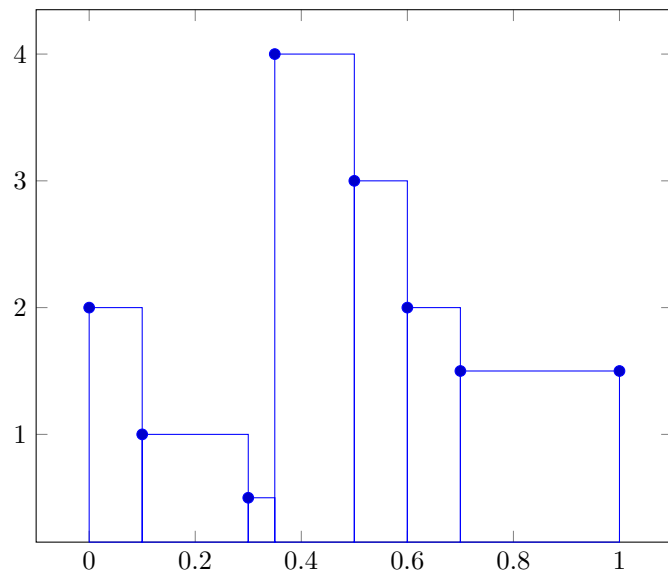


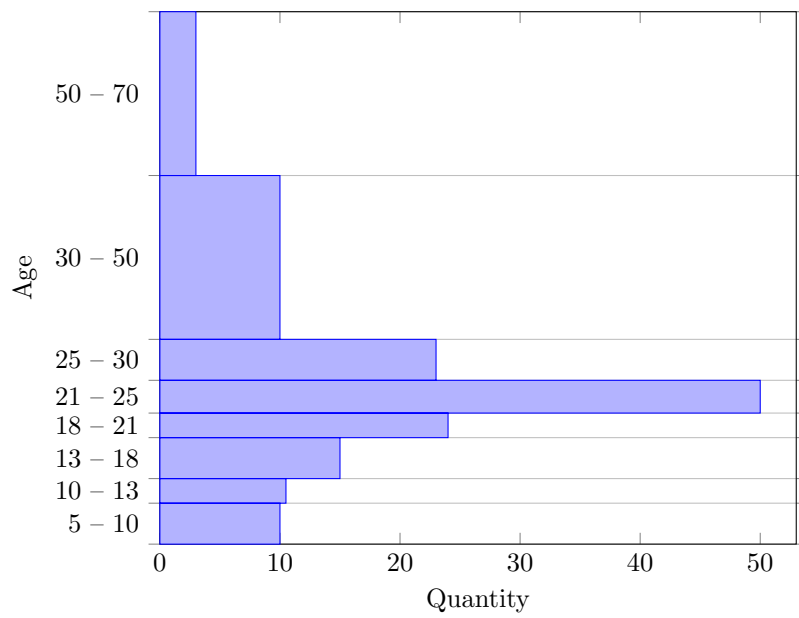
1.12 Bar Plots



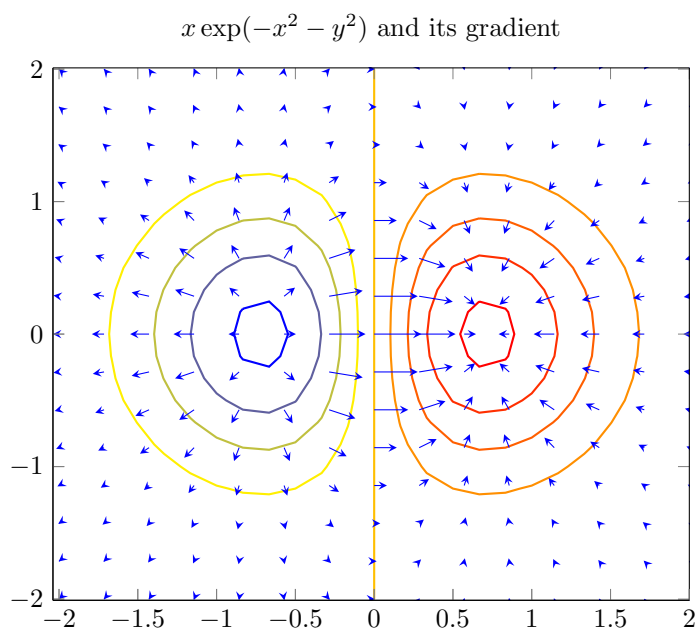


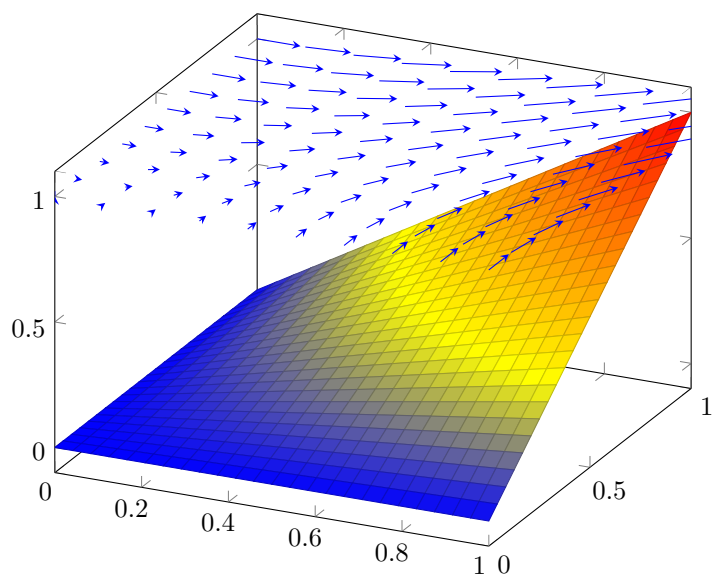




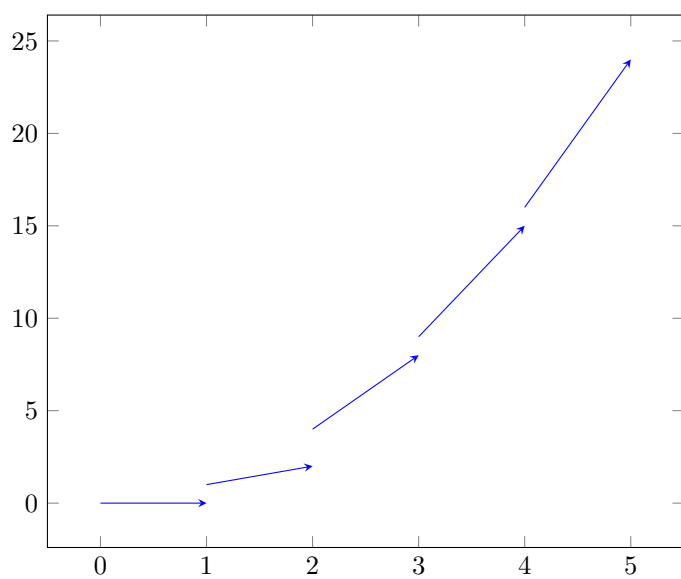


1.13 Quiver Plots

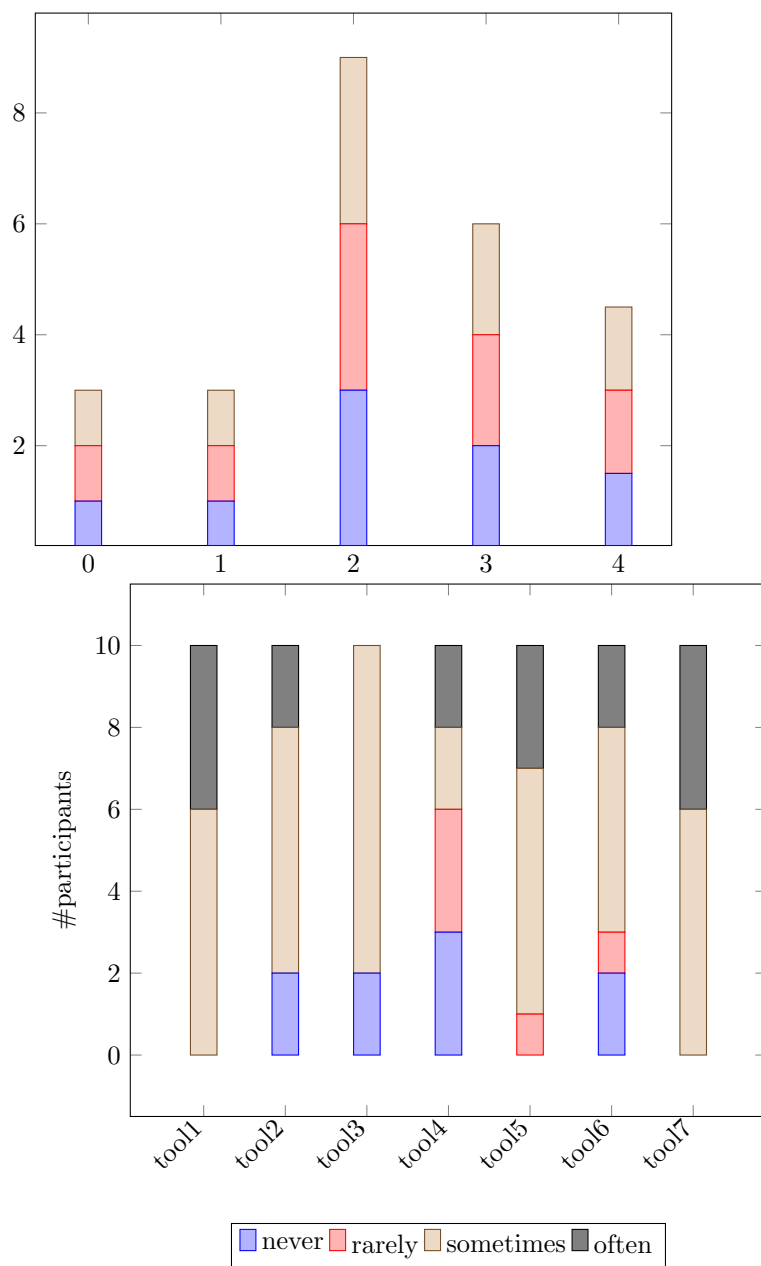


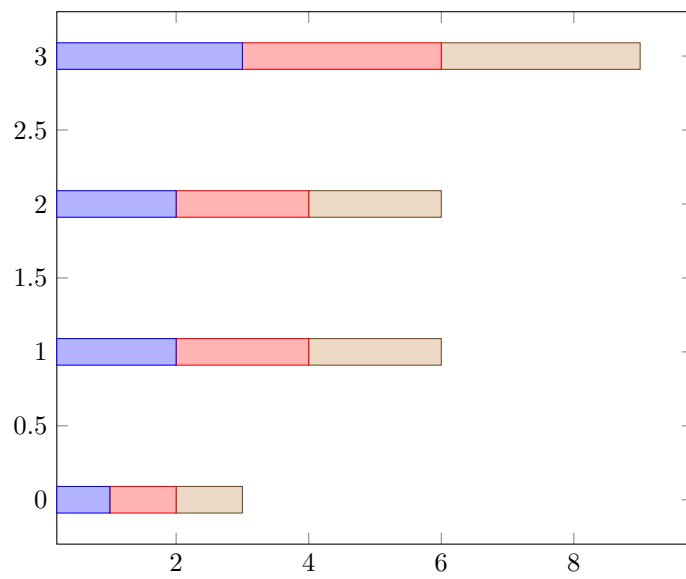


Quiver and plot table

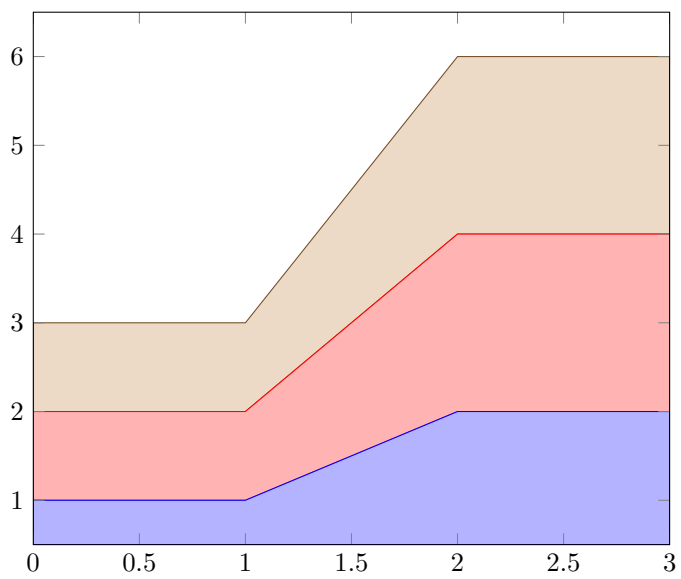


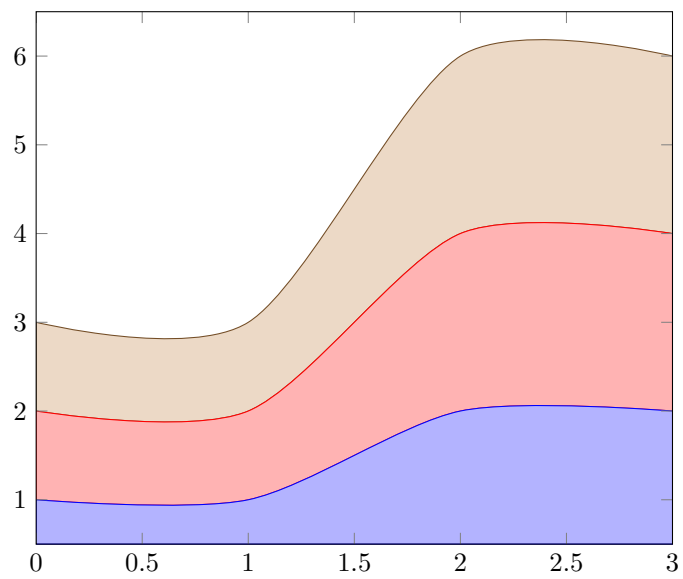
1.14 Stacked Plots



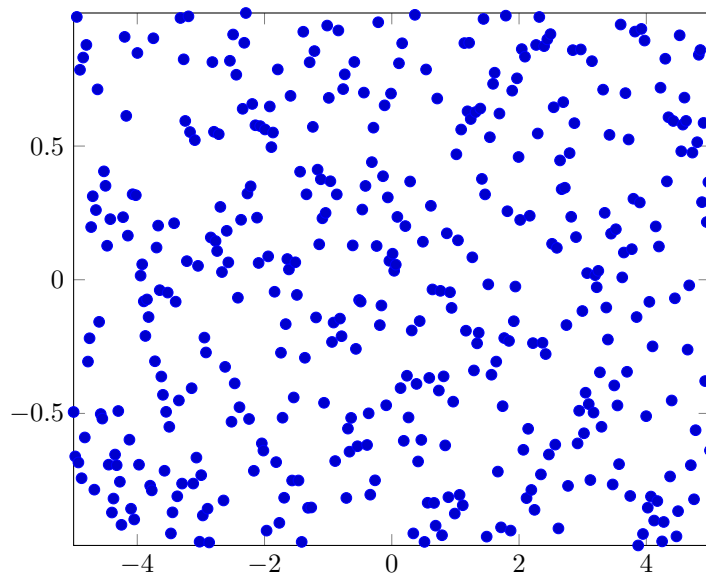


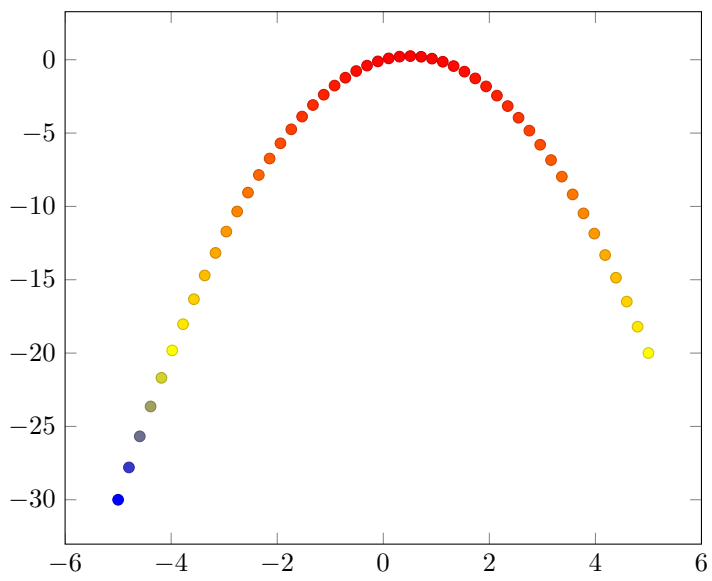
1.15 Area Plots



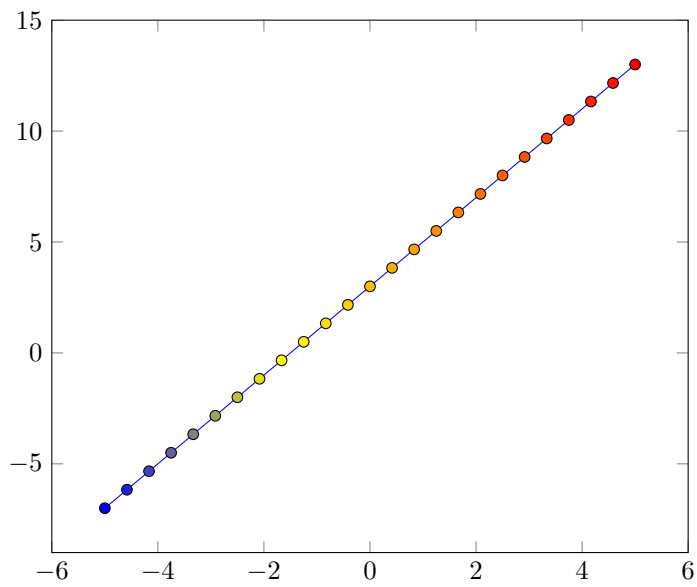


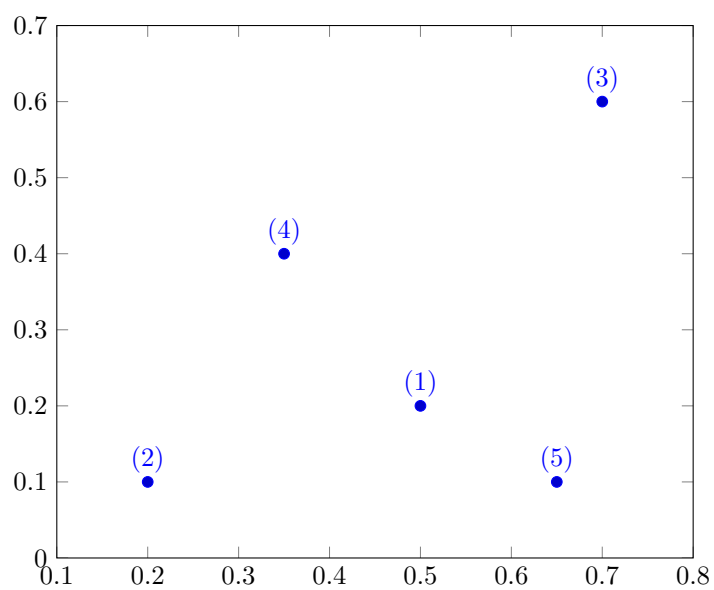
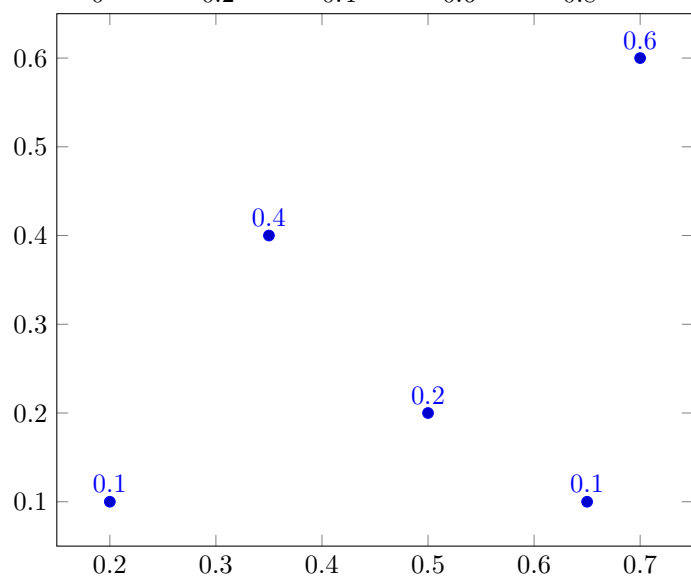
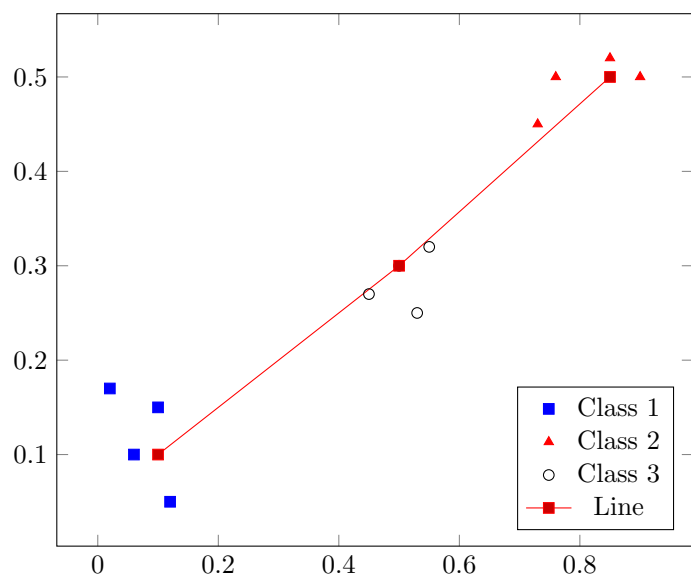
1.16 Scatter Plots

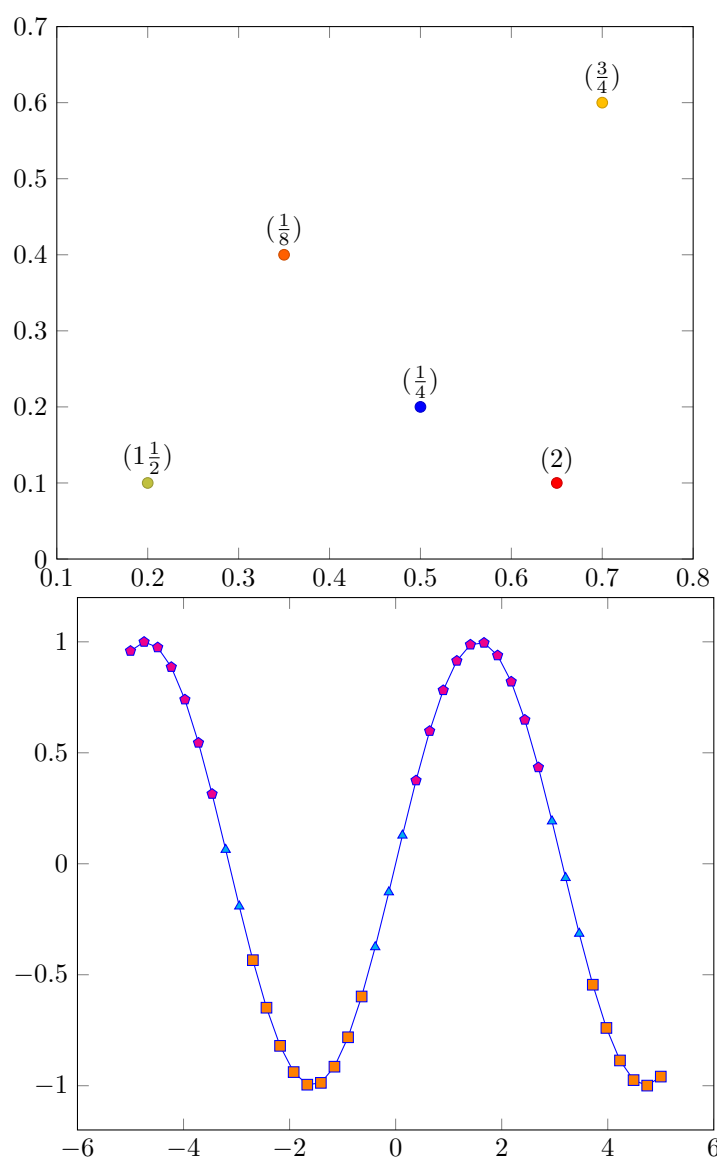




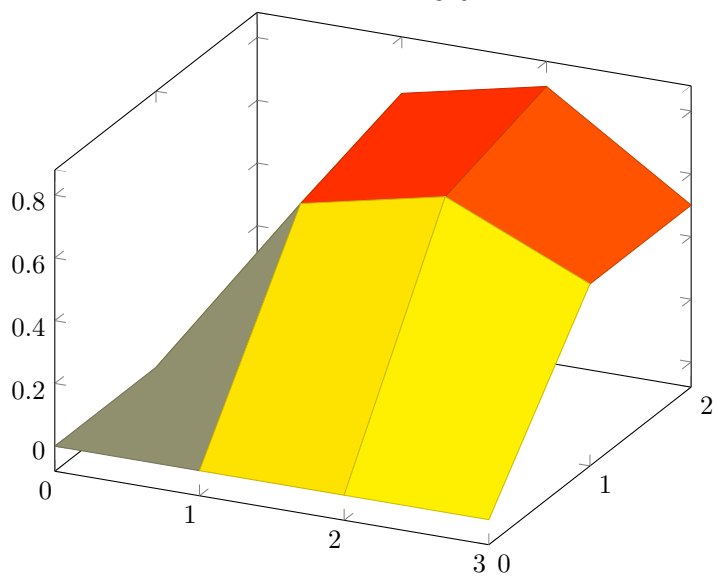
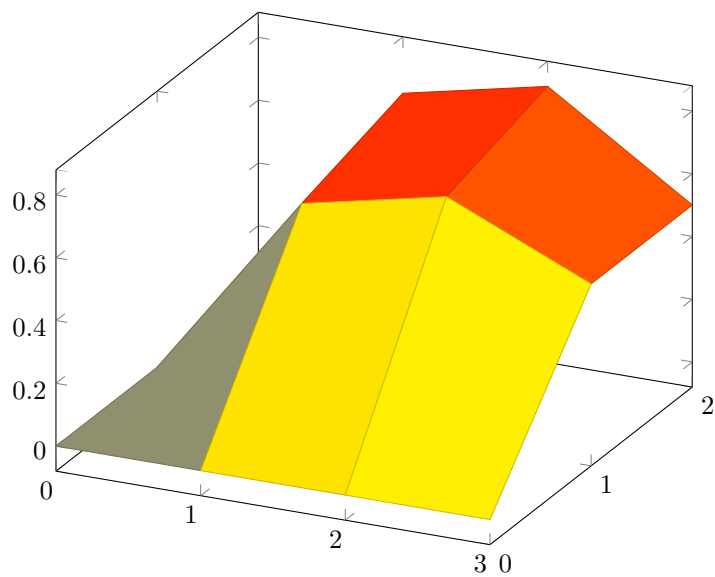
Black draw color and varying fill color

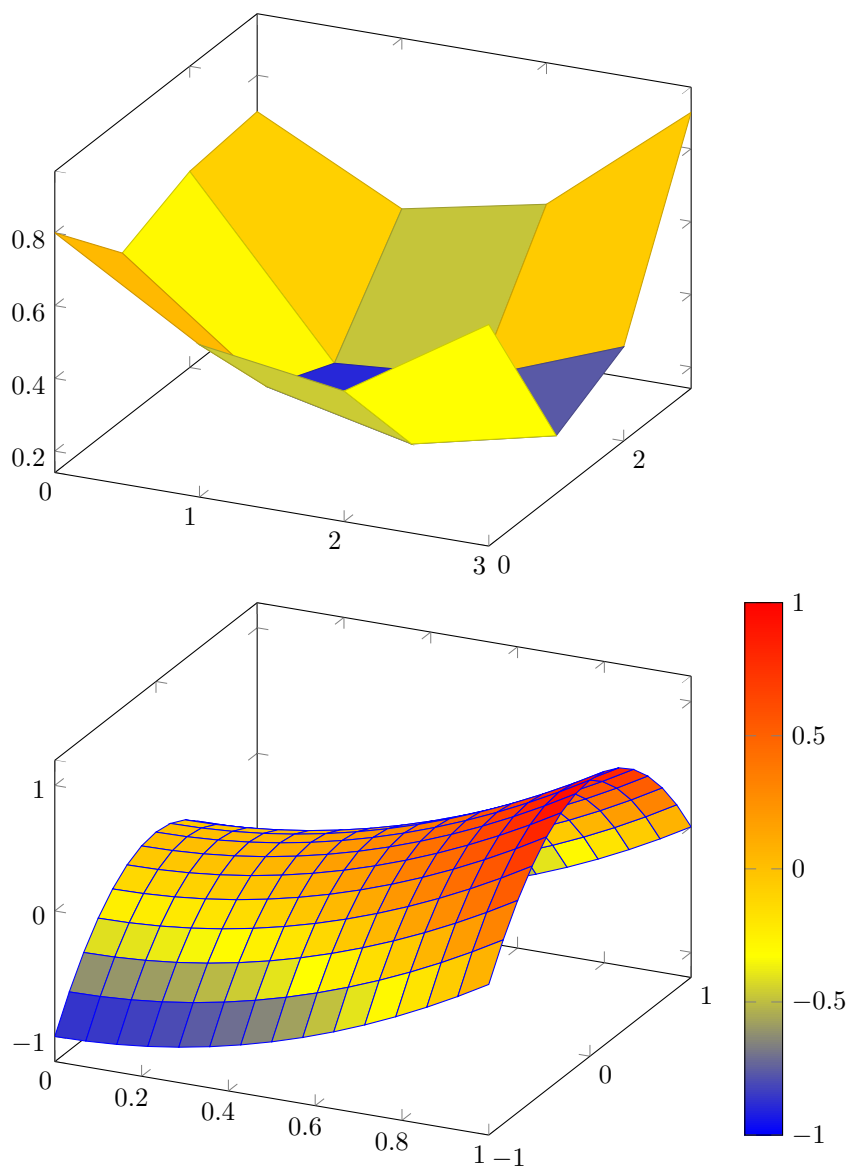


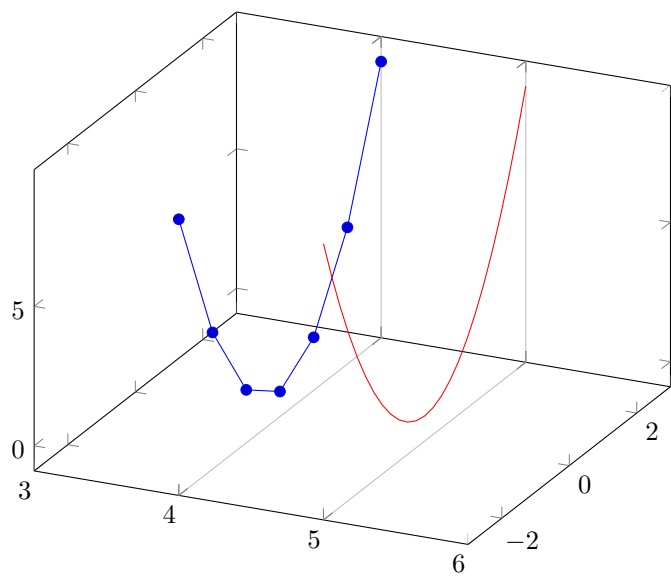
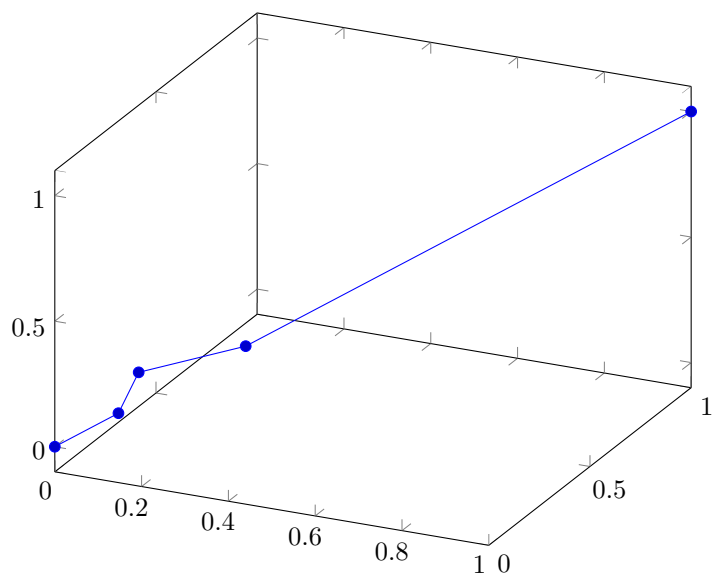
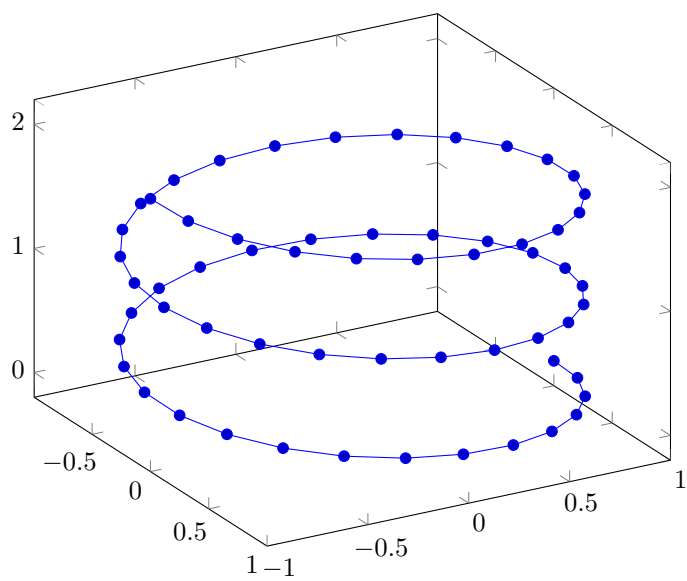




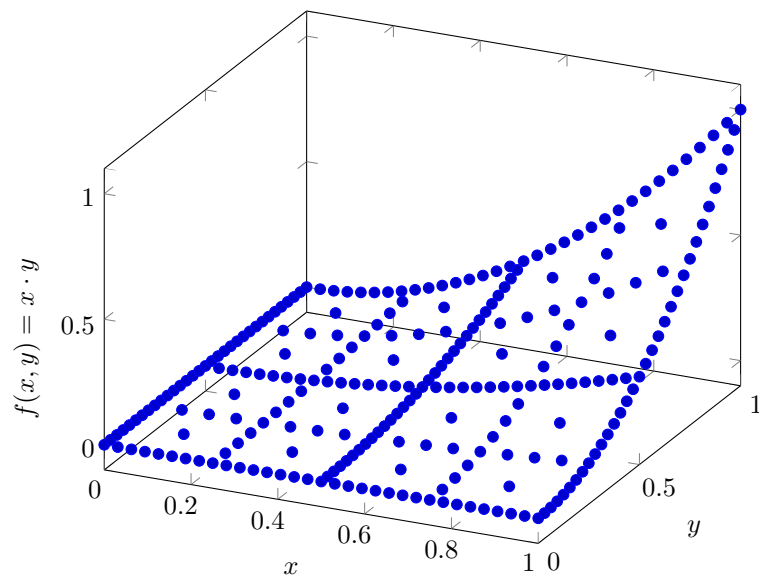
1.17 3d plots



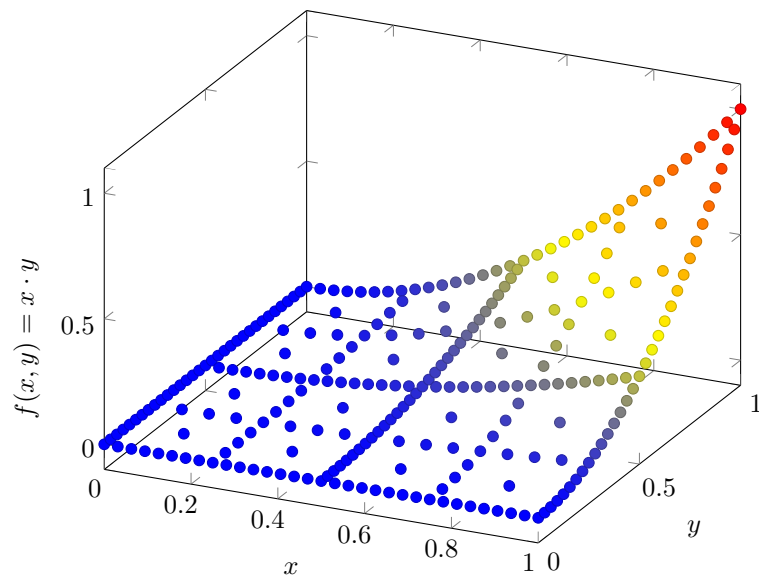


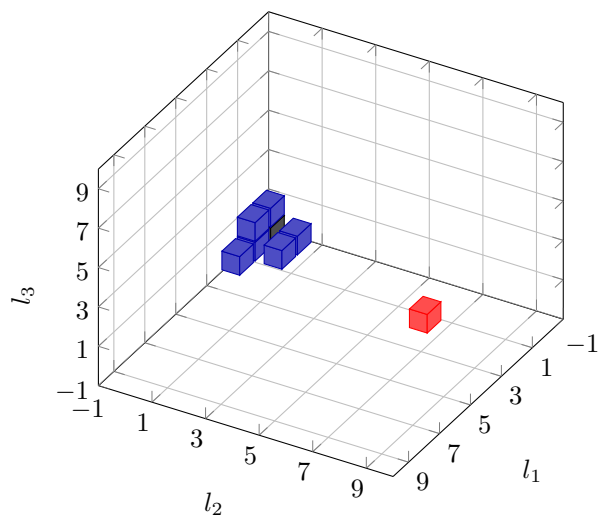


A Scatter Plot Example

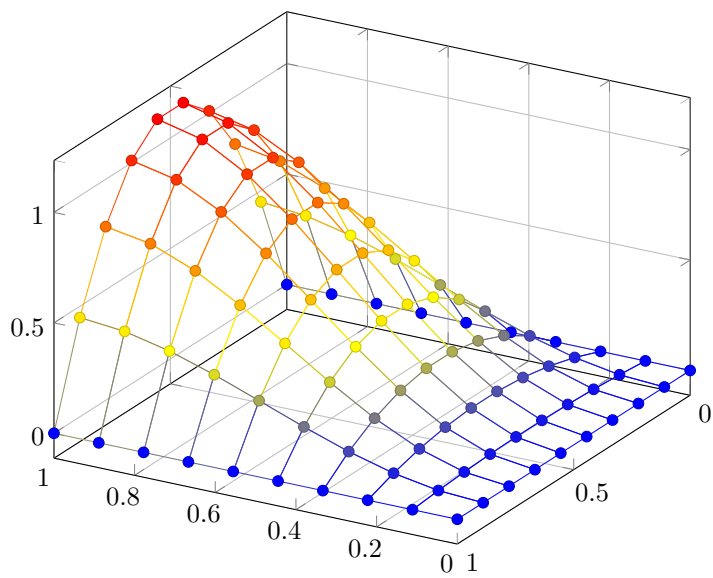


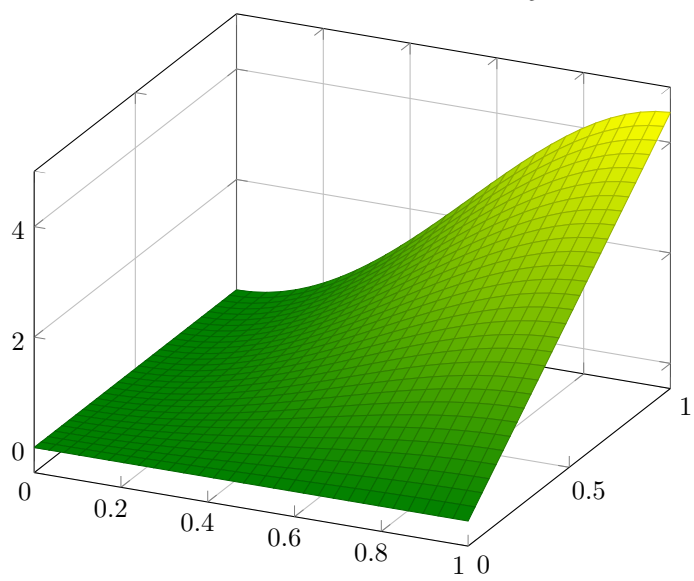
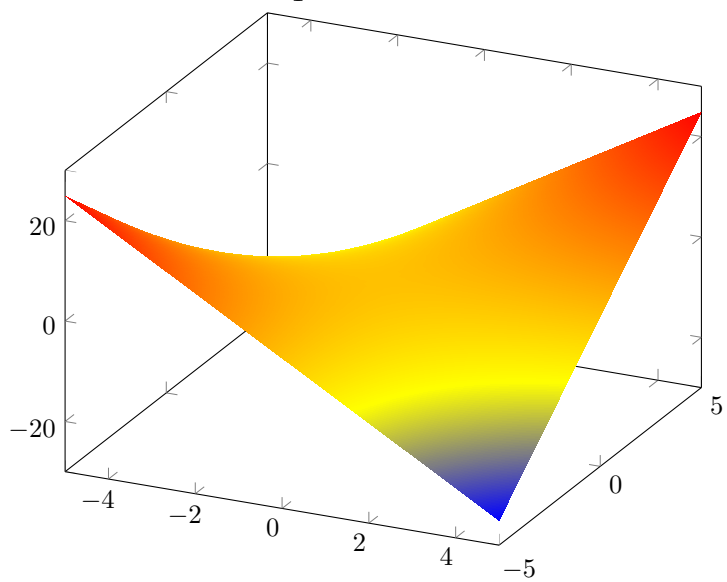
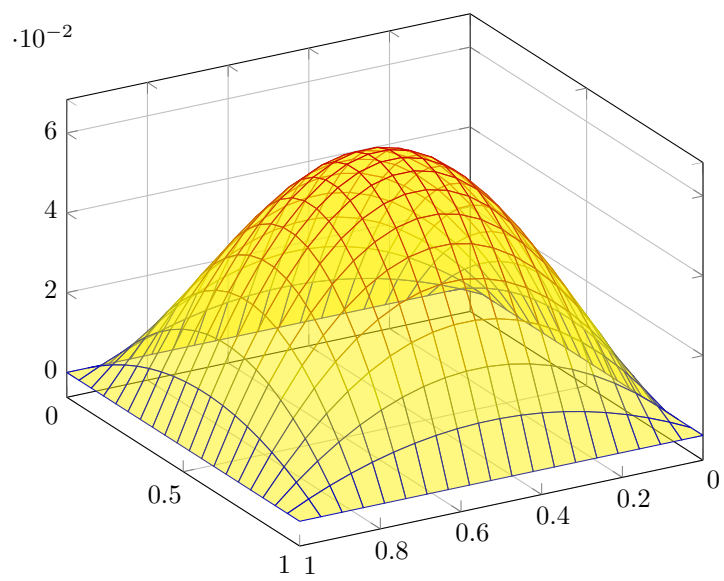
A Scatter Plot Example

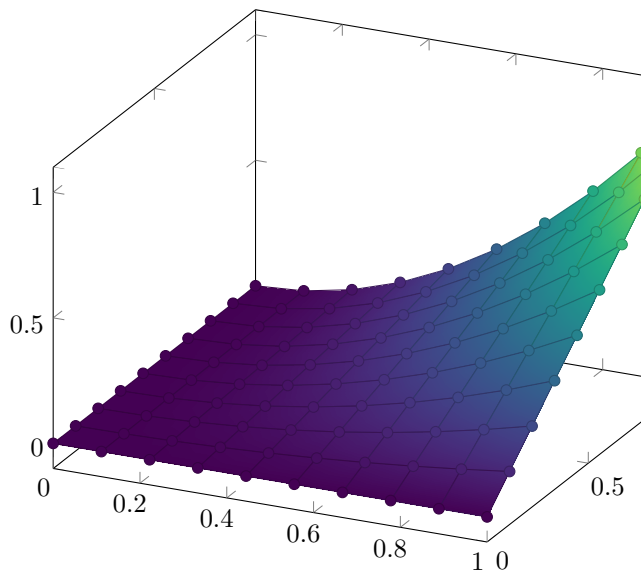
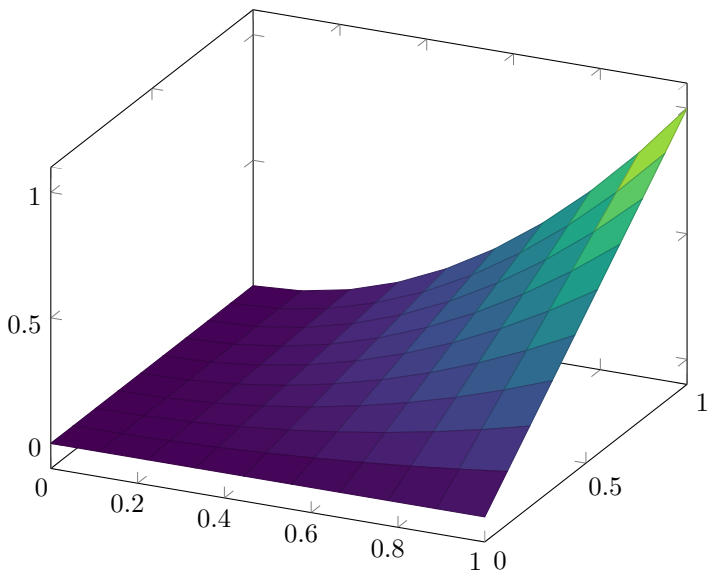
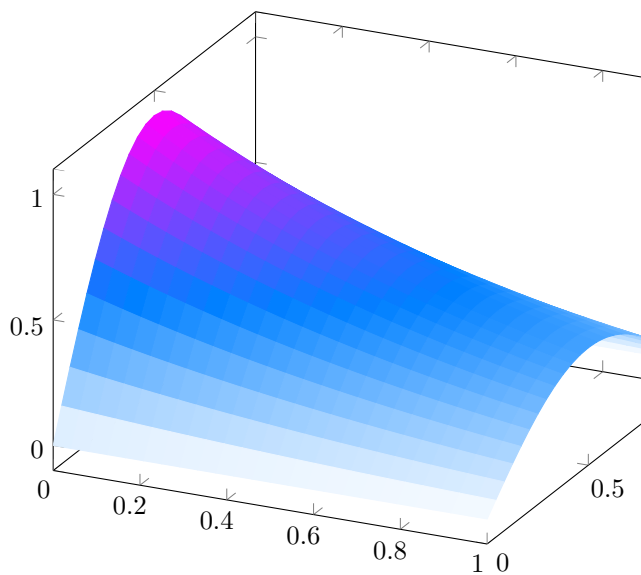
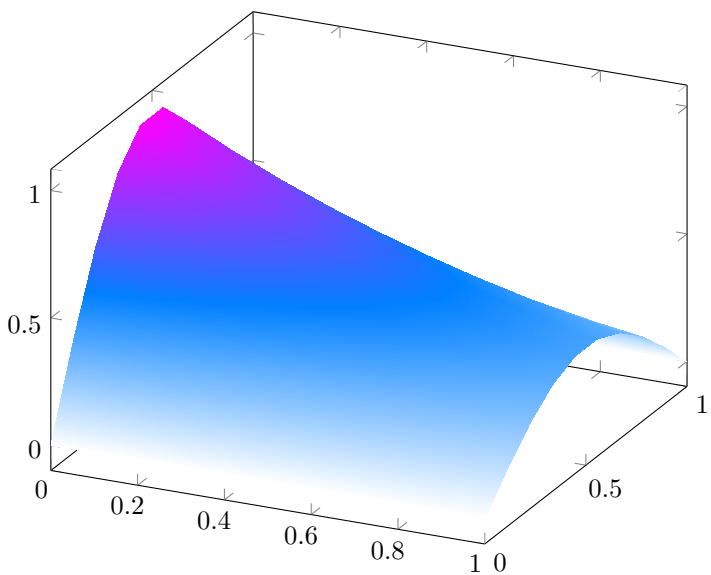
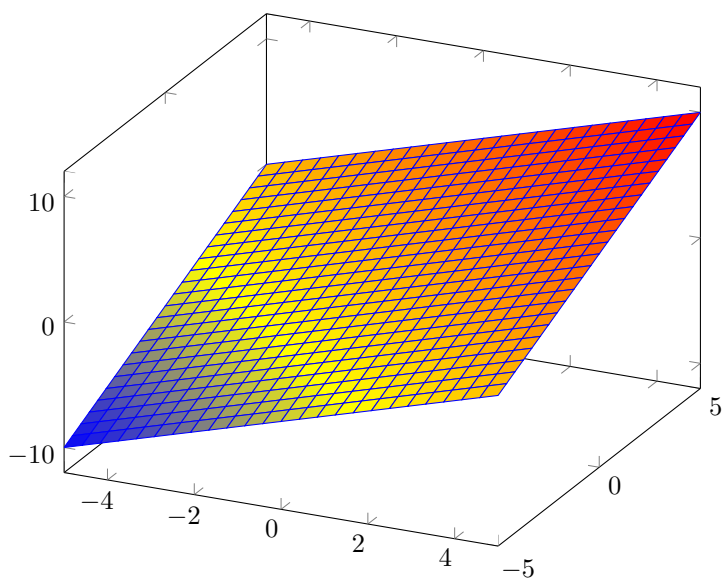


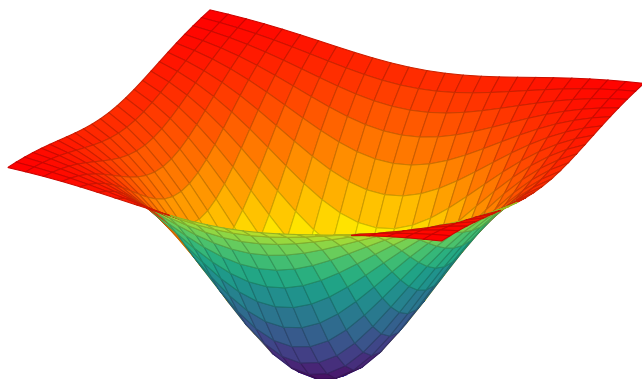
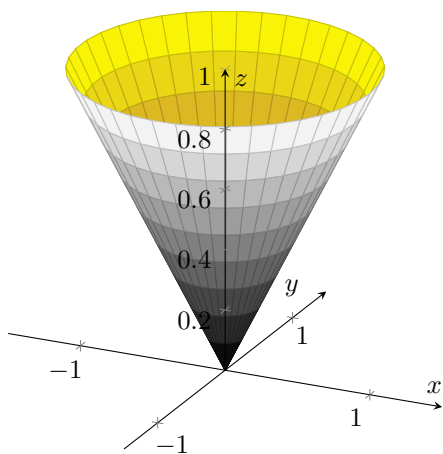


1.18 3d scatter plots

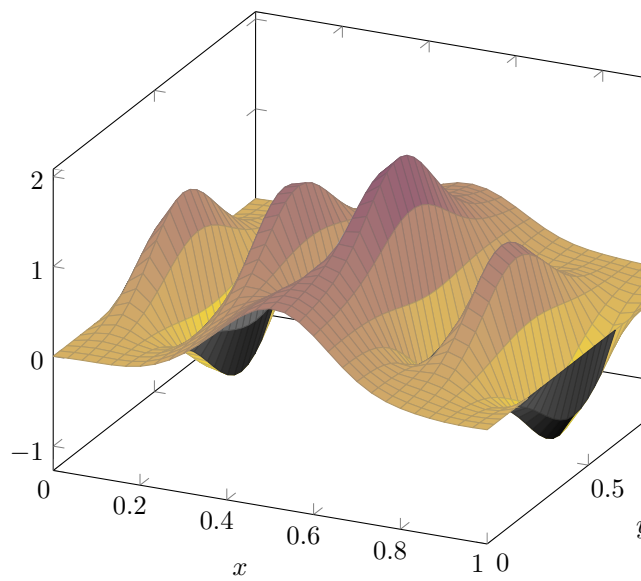
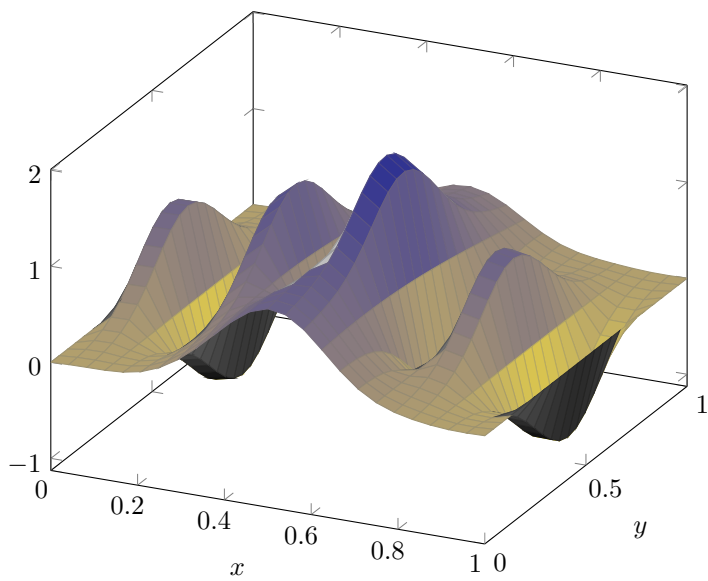




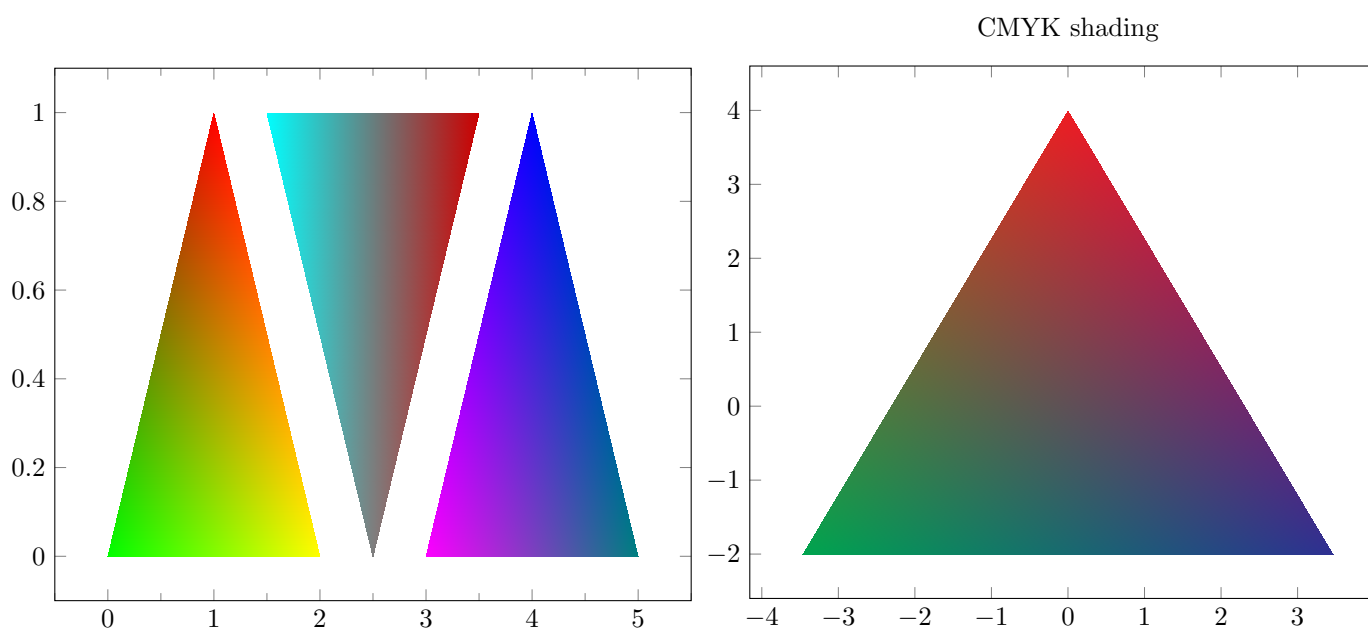
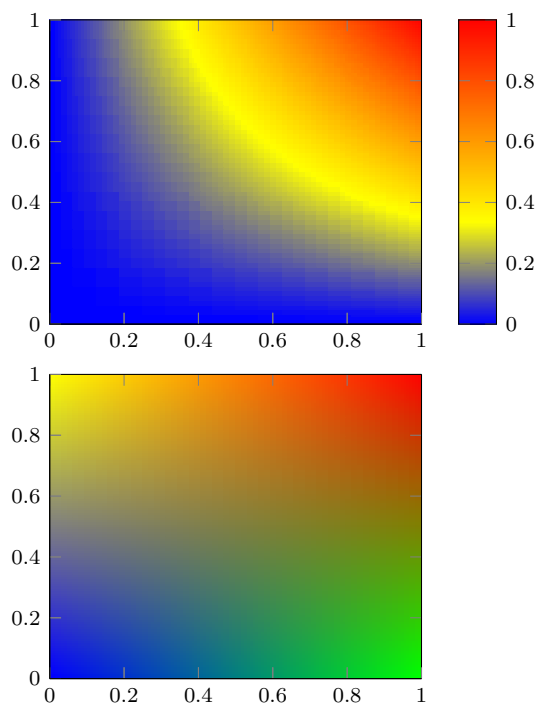




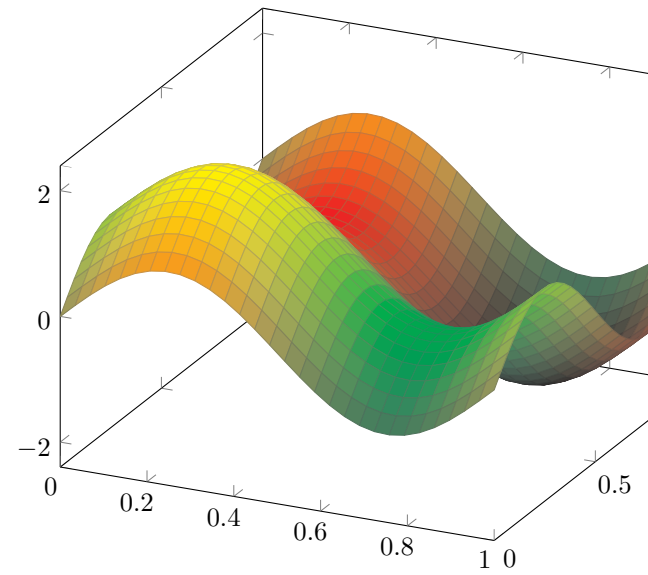
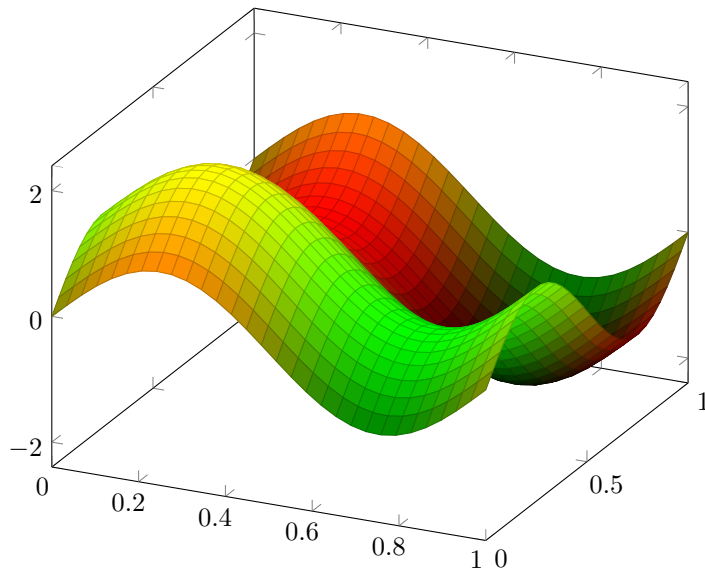
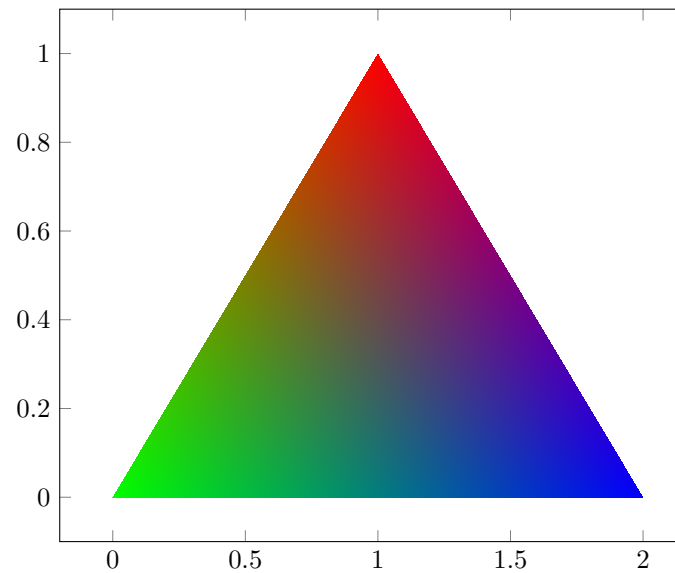
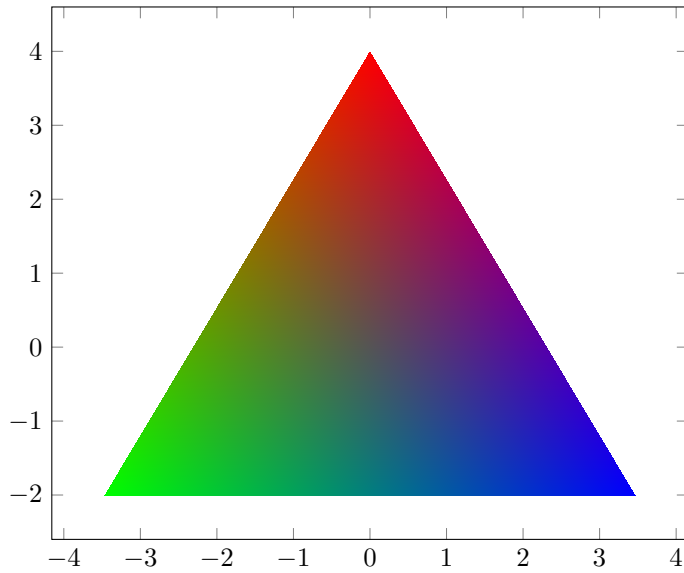
Example needing fine-tuning



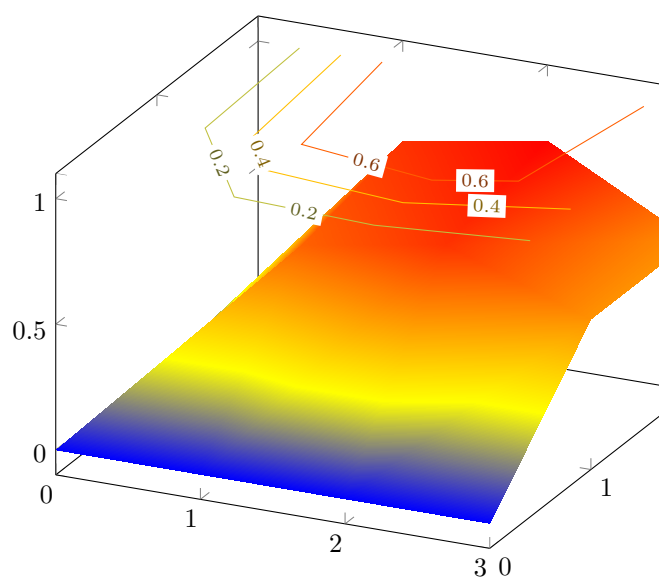
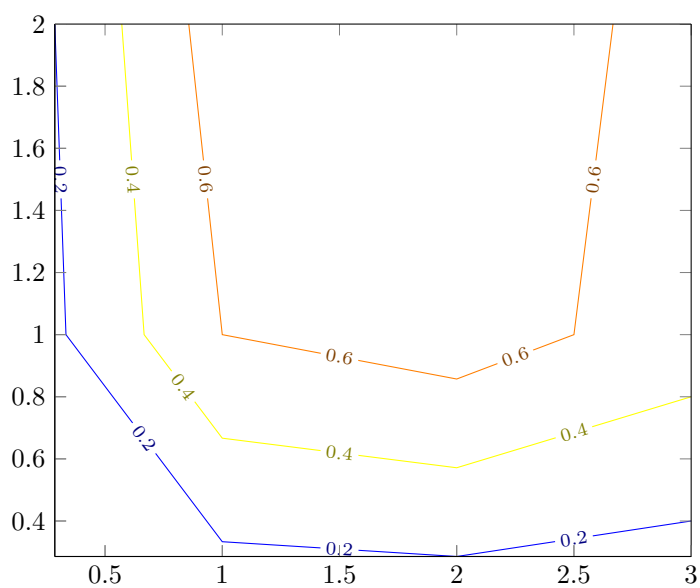
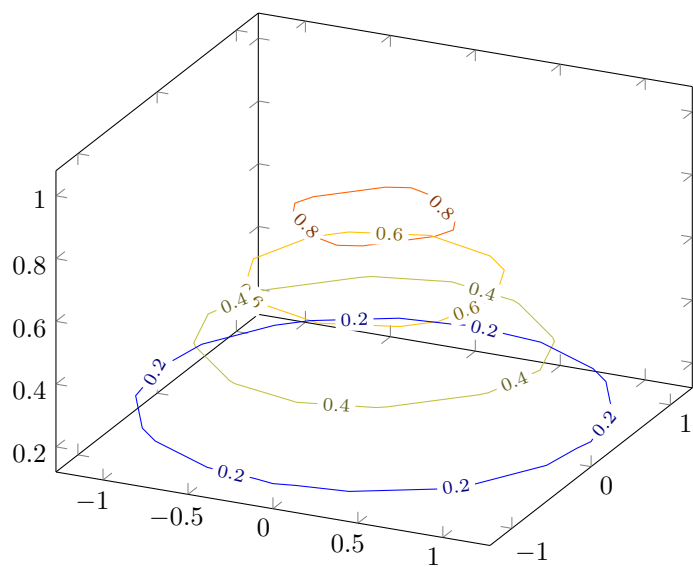
Example needing fine-tuning

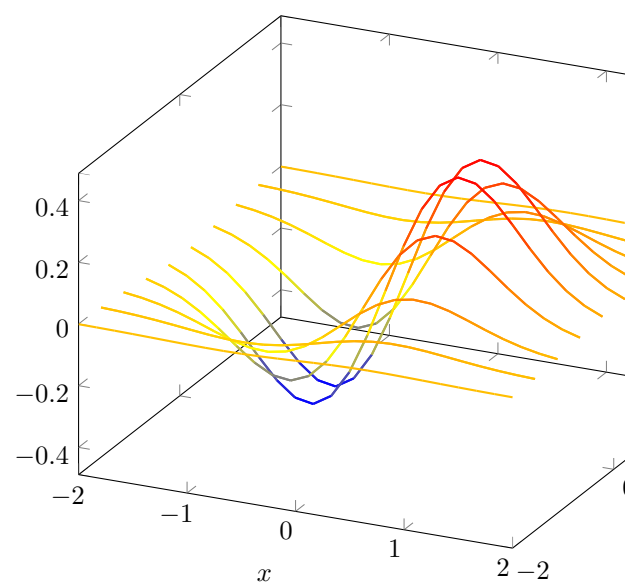
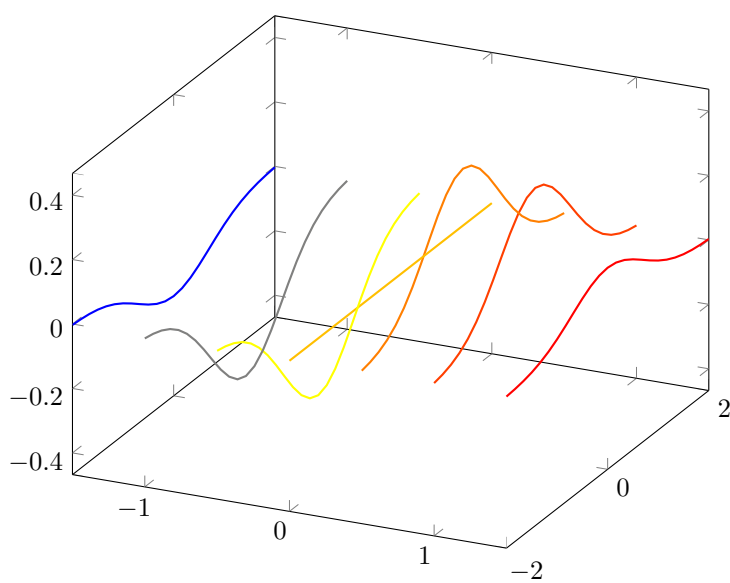
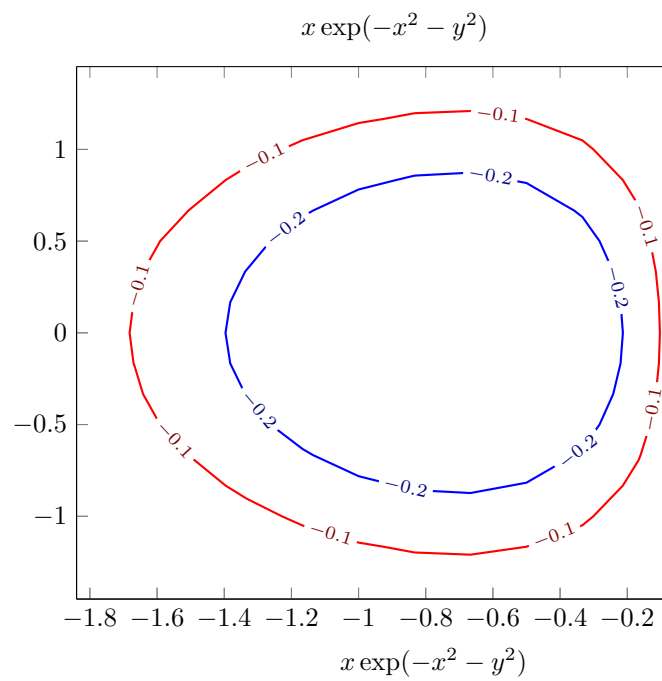
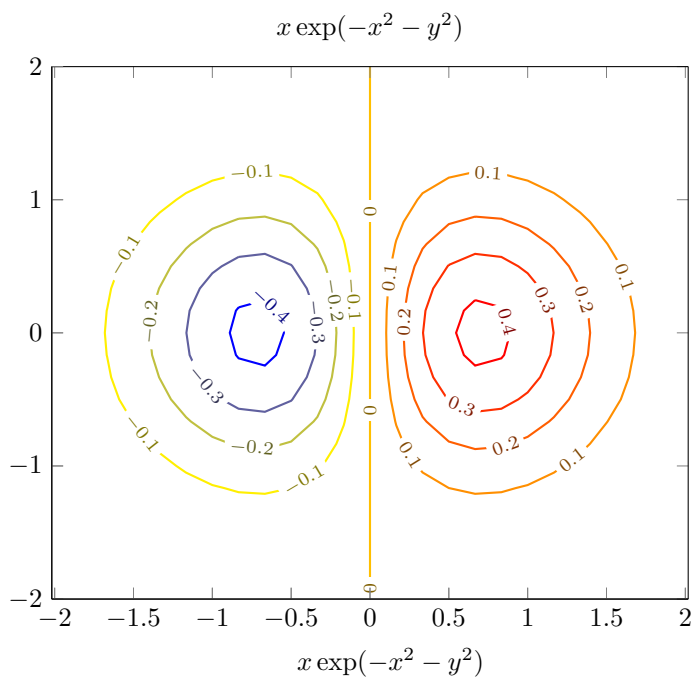


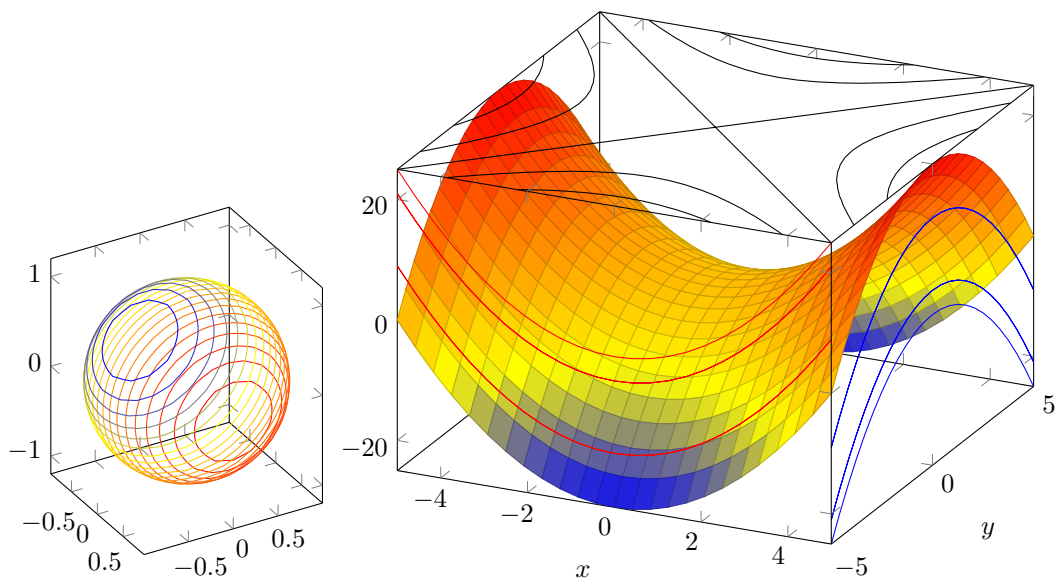
RGB shading



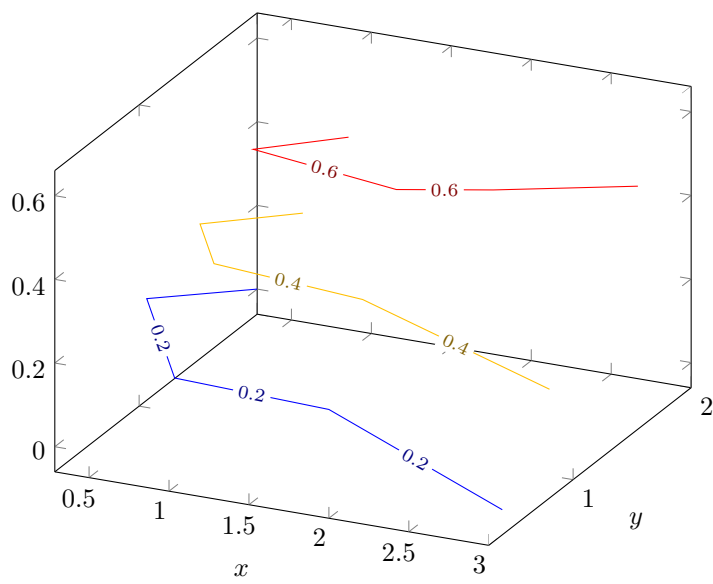
1.19 Contour Plots



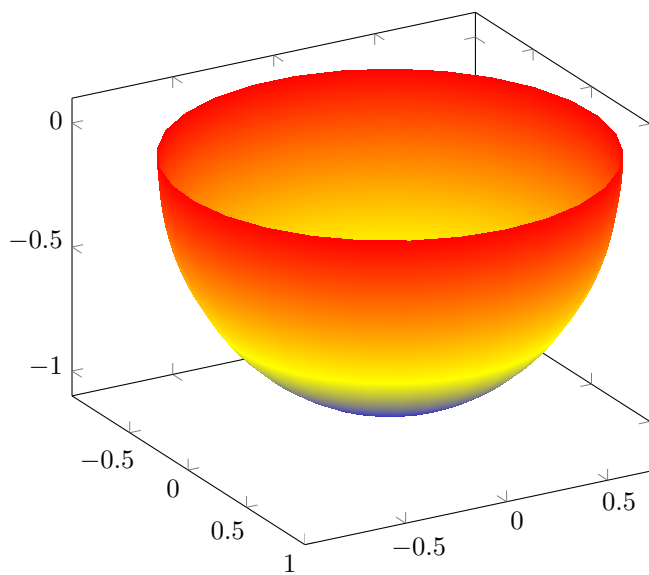
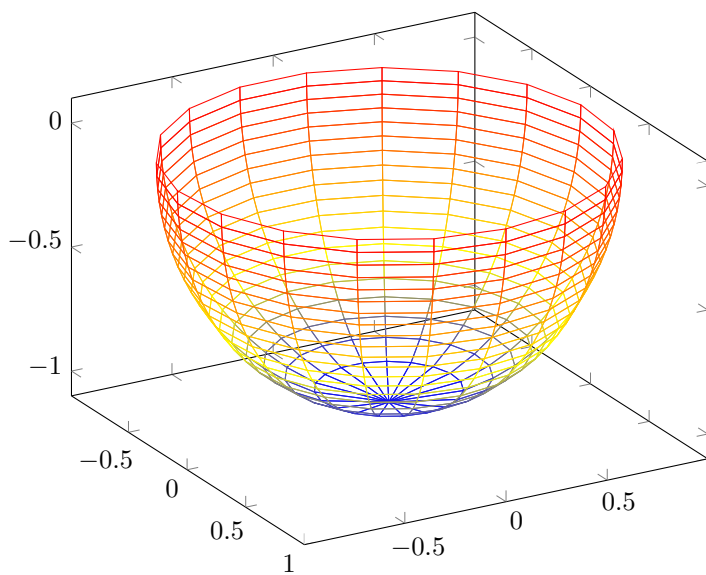
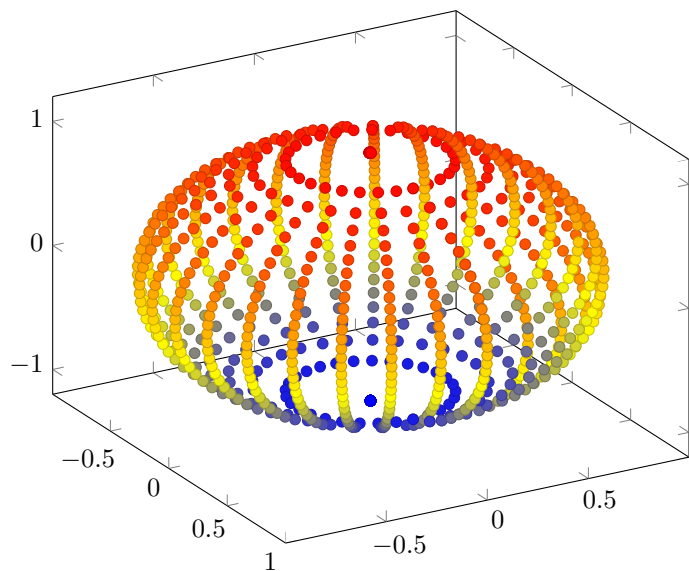
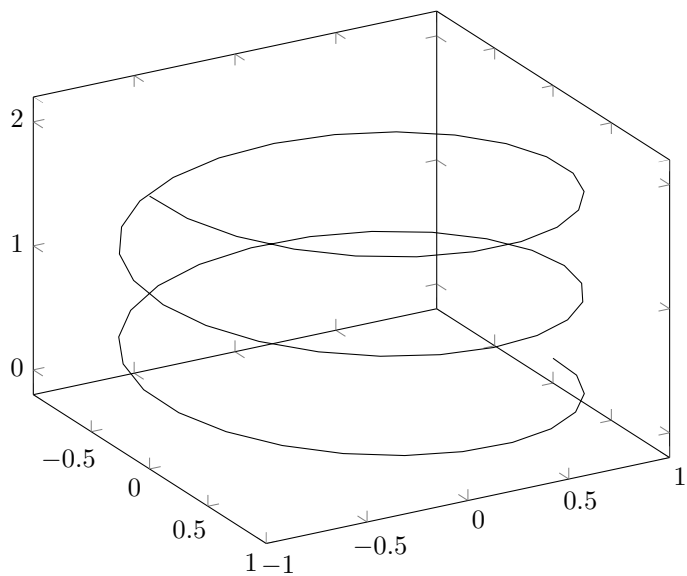


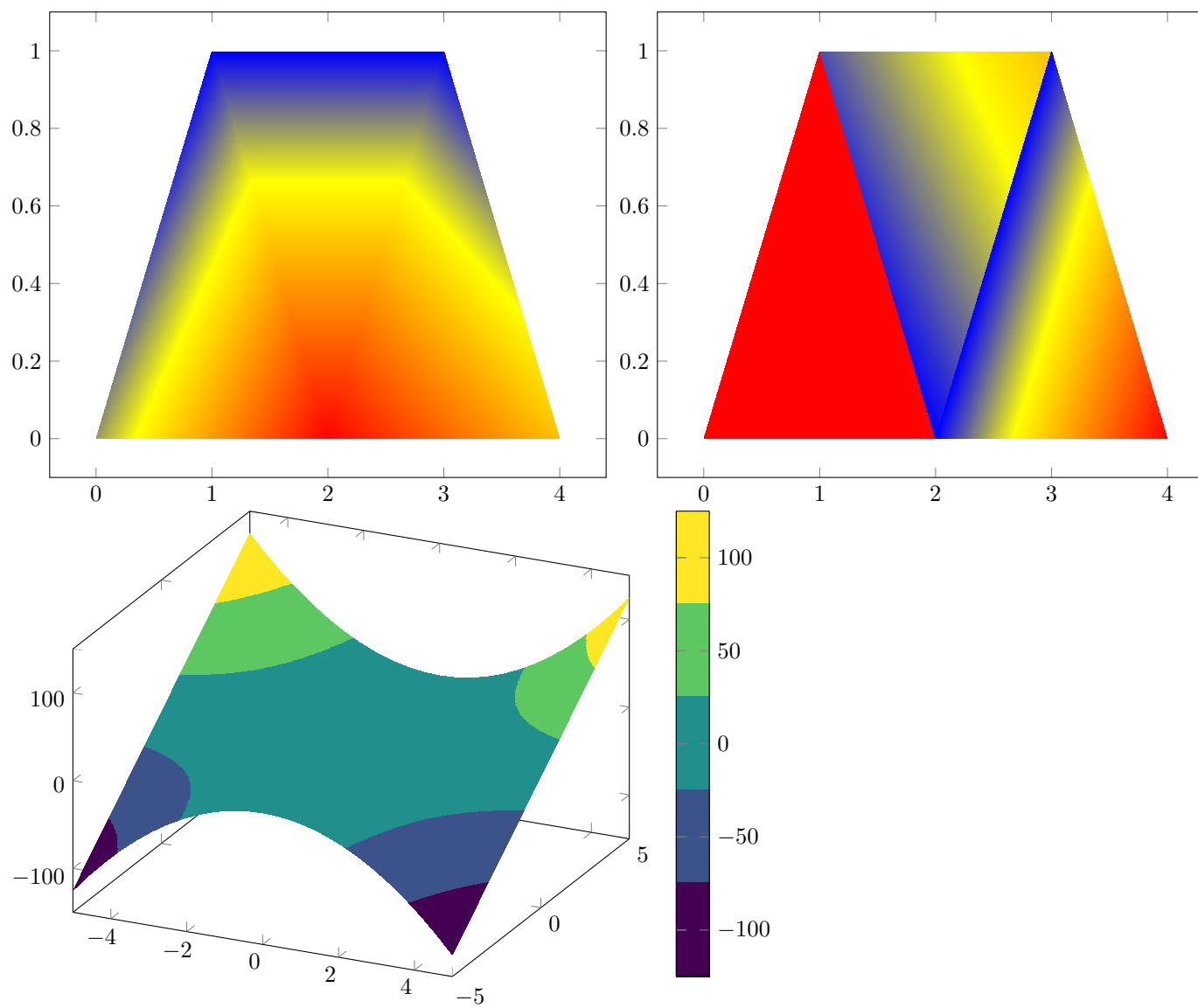


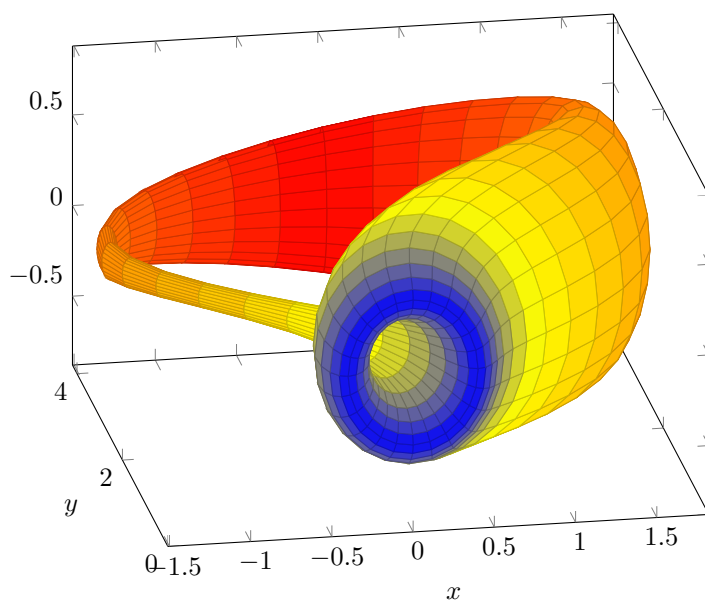
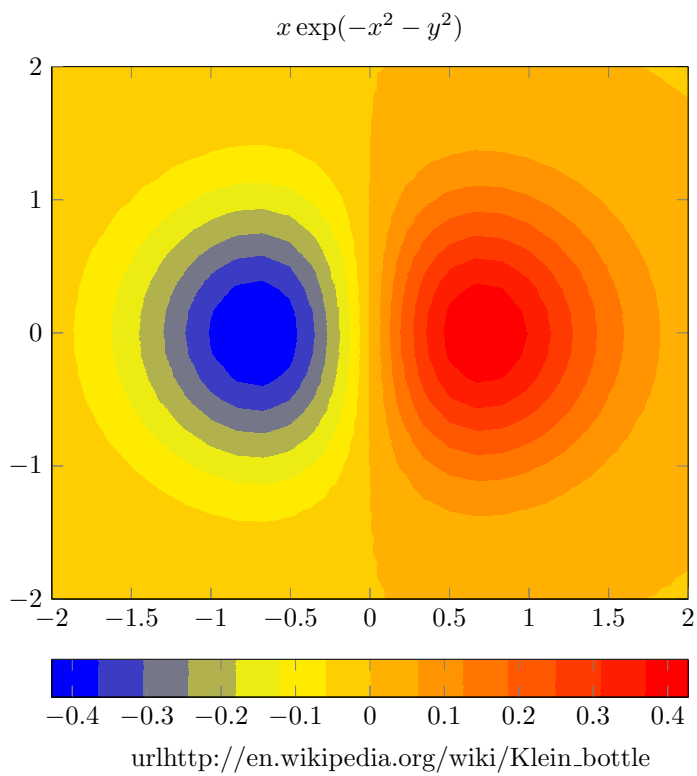
Separating z from Color Value

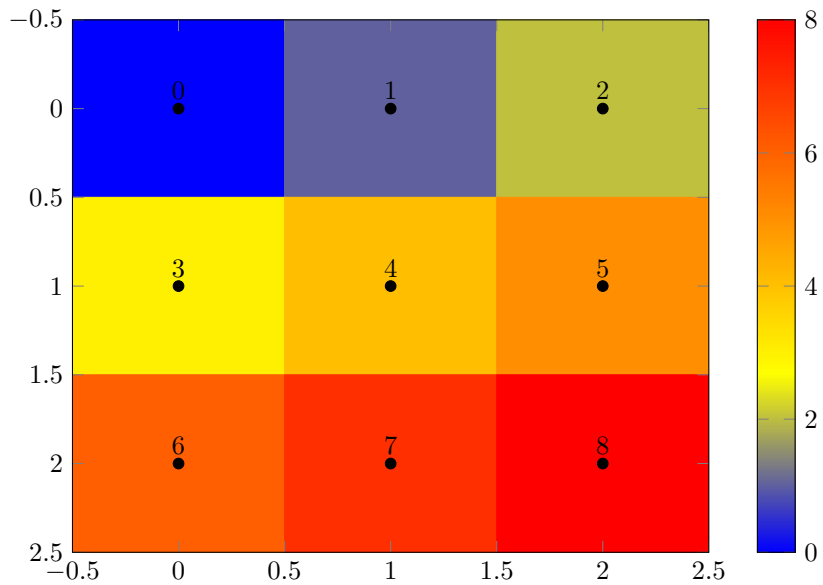
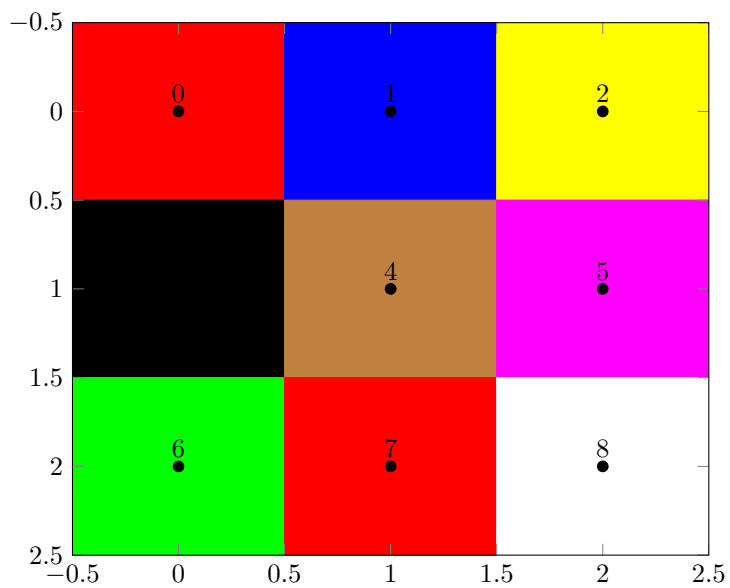


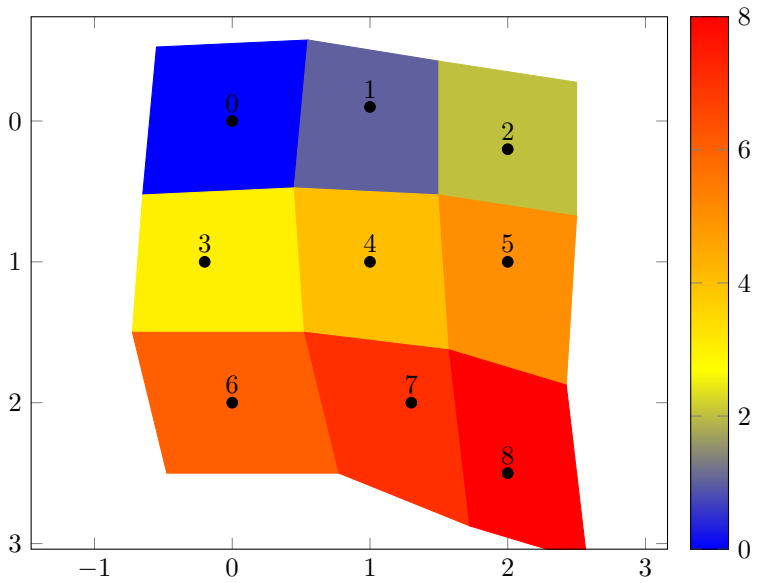
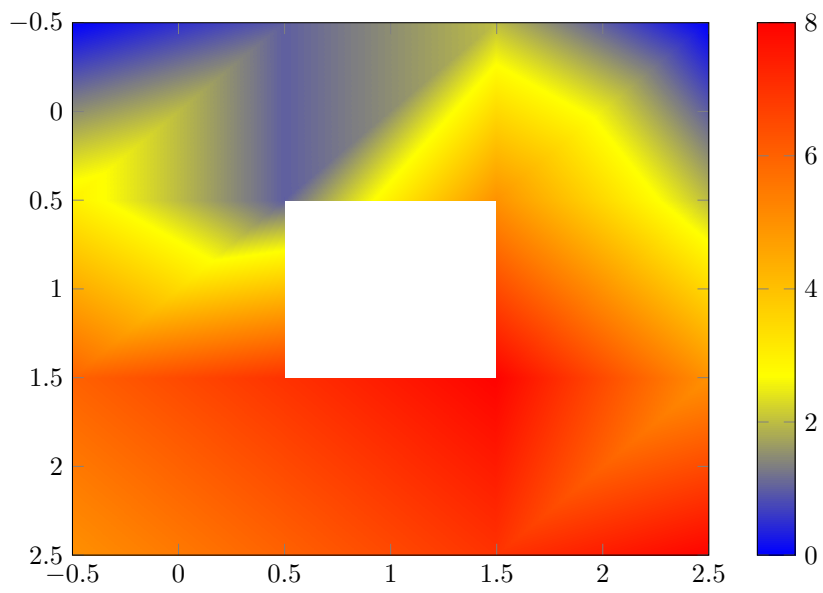
1.20 Parameterized Plots



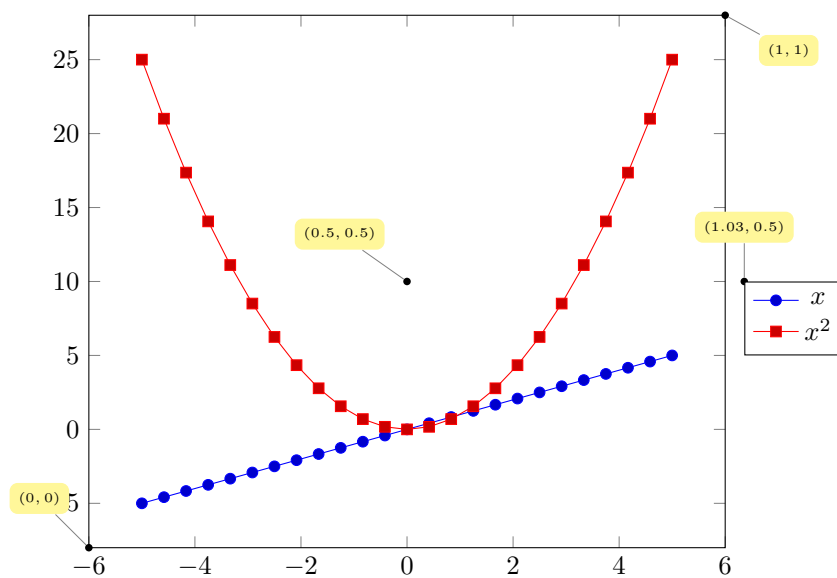
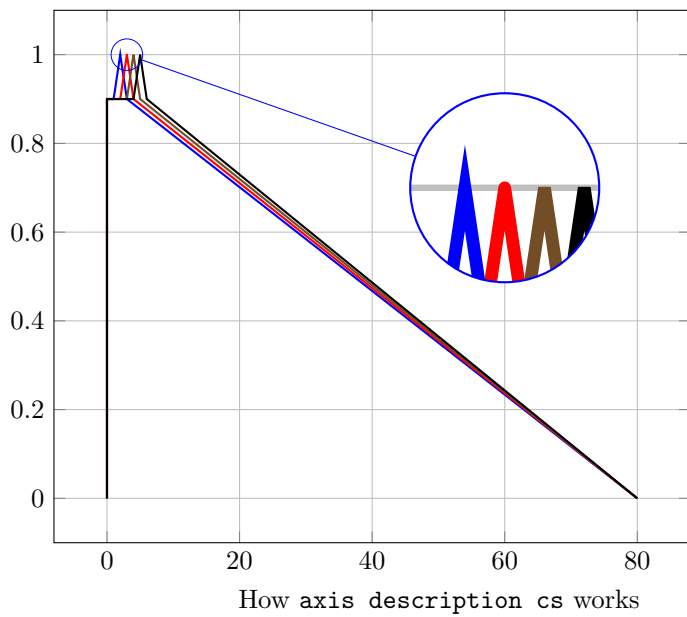


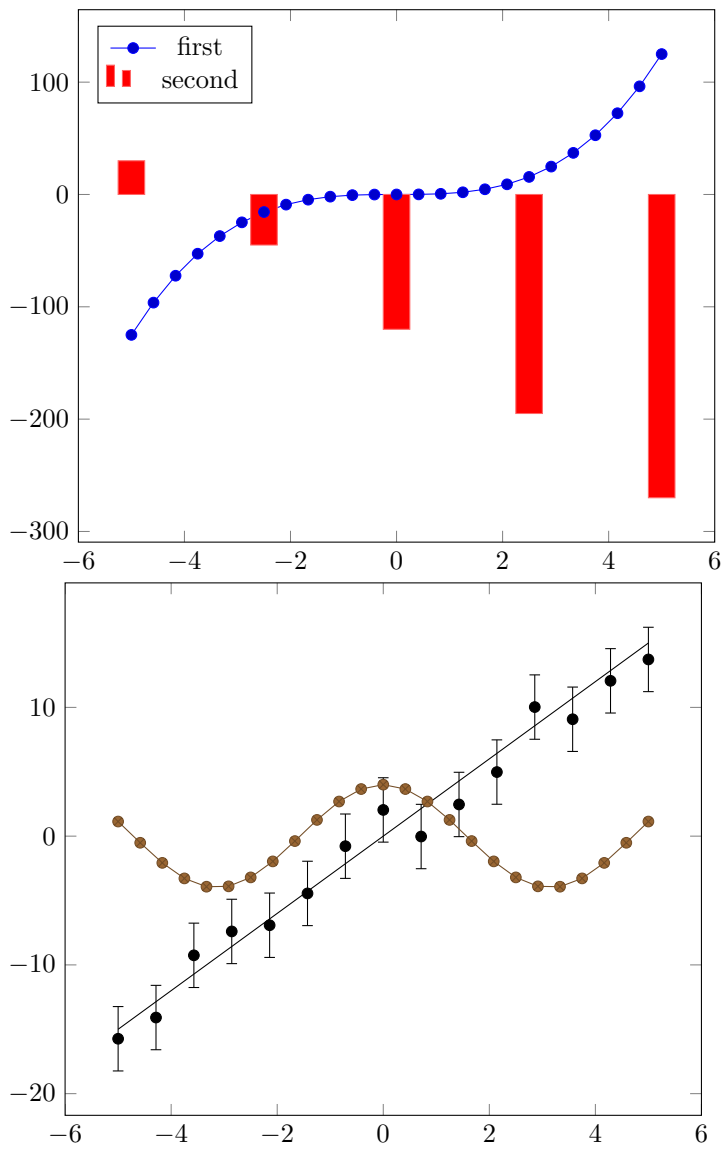




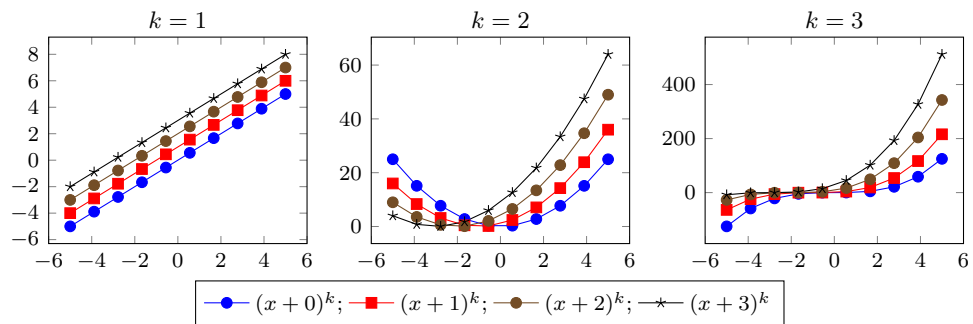


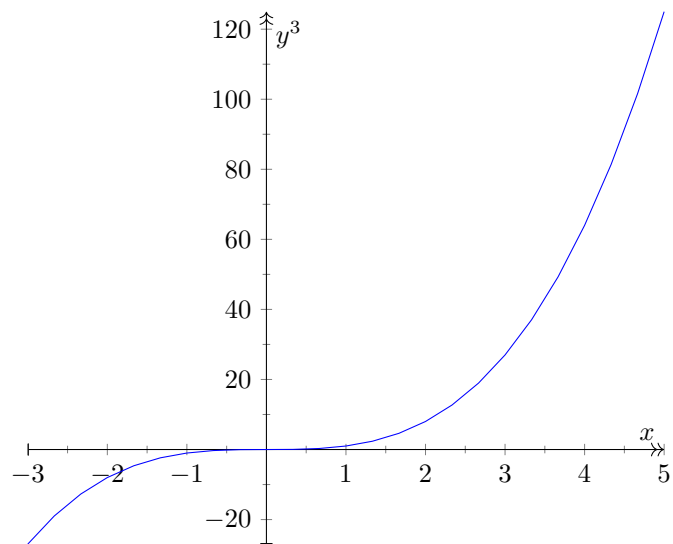
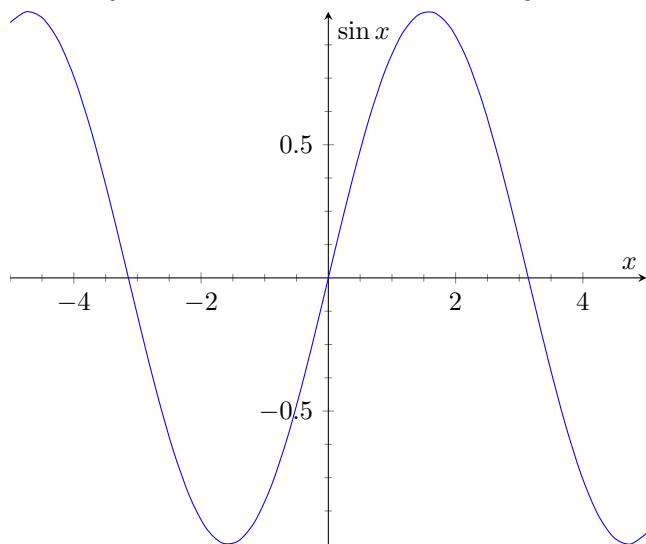
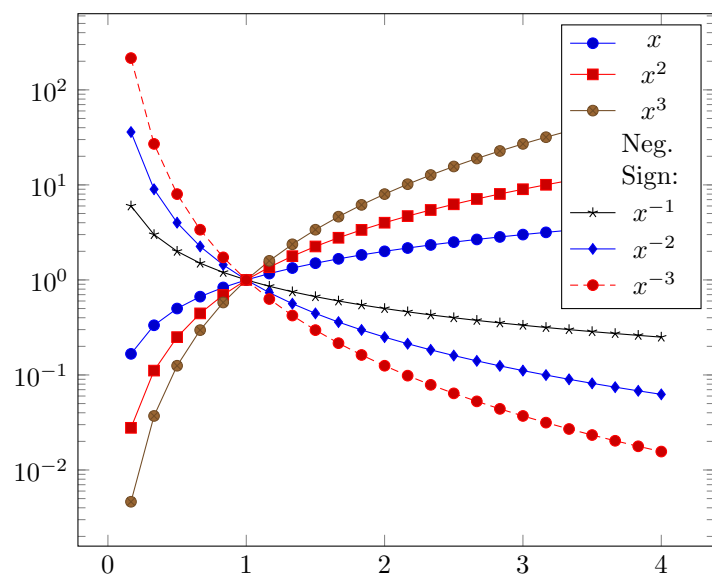
1.21 Specialty graphs and settings

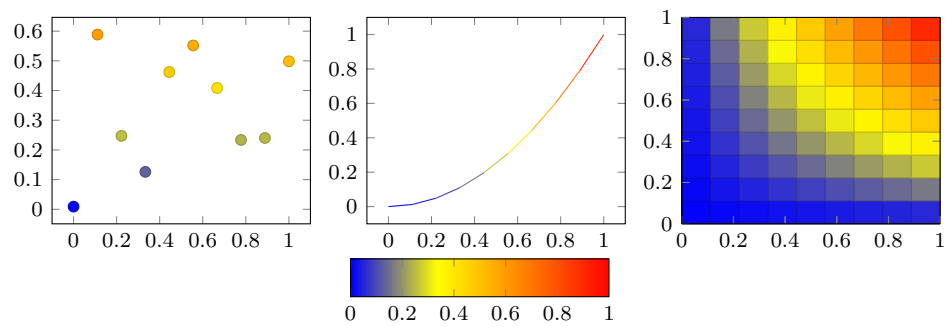
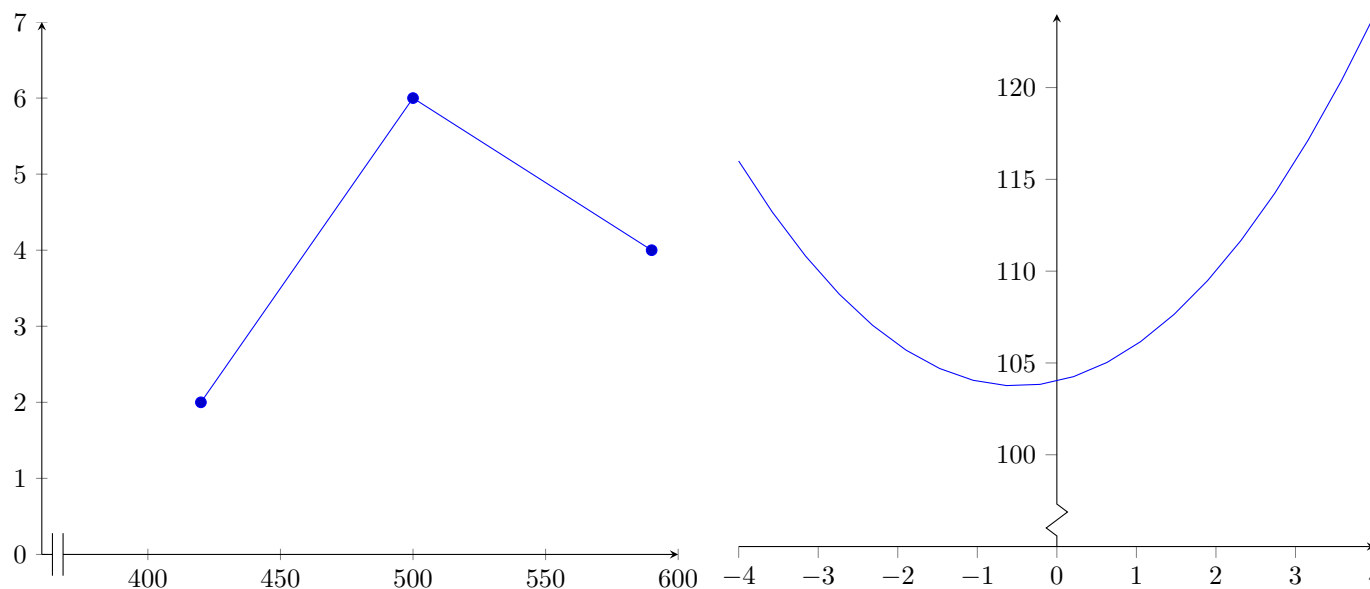
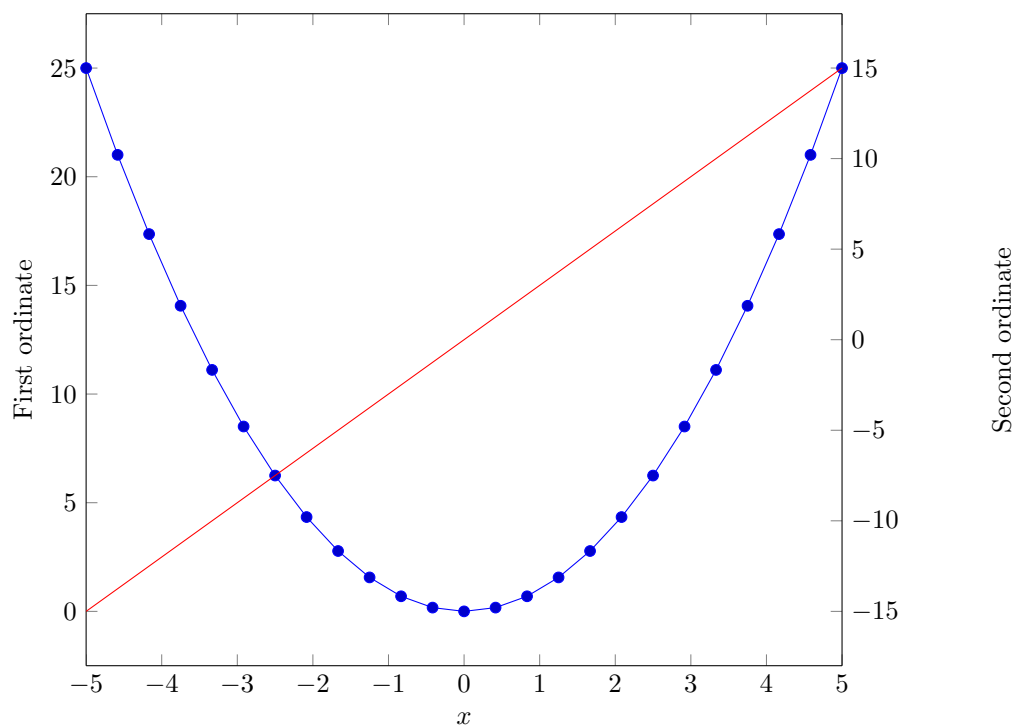


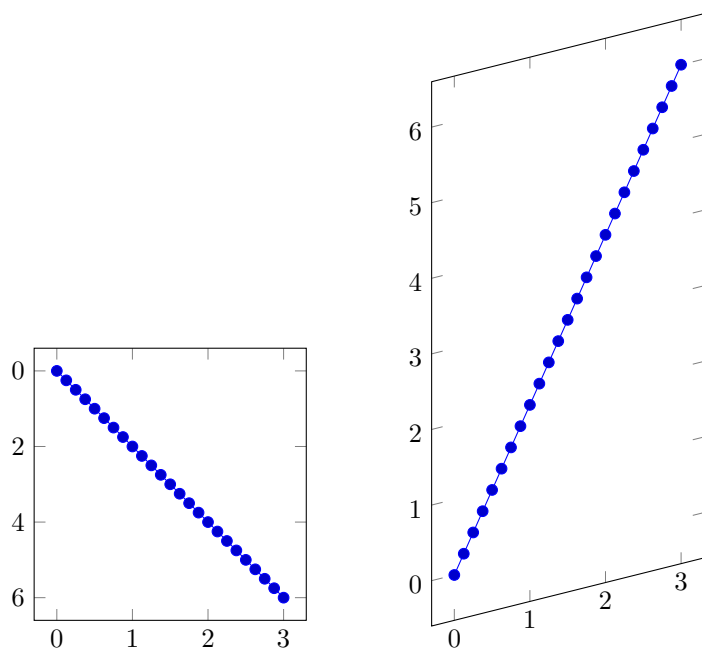


The picture shows the estimations \bullet which are subjected to noise. It appears the model --- fits the data appropriately. Finally, --- is only here to get three examples.



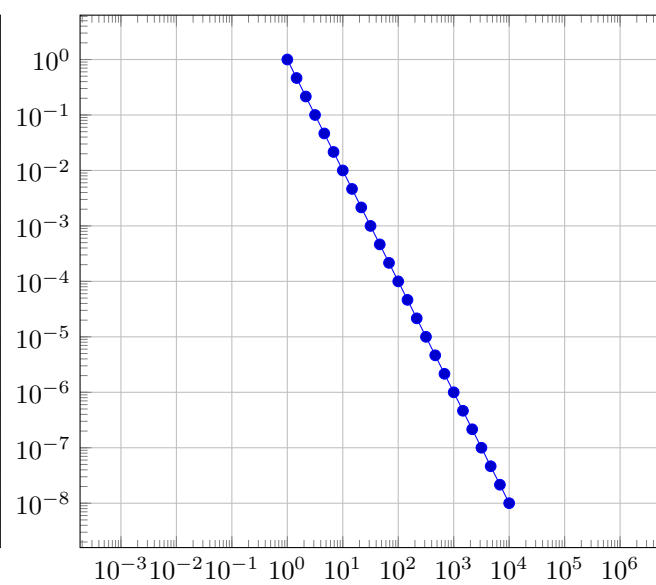
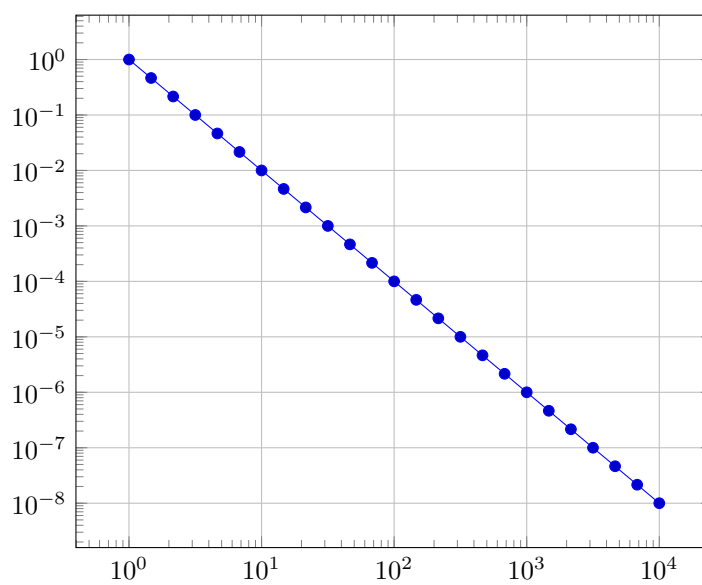




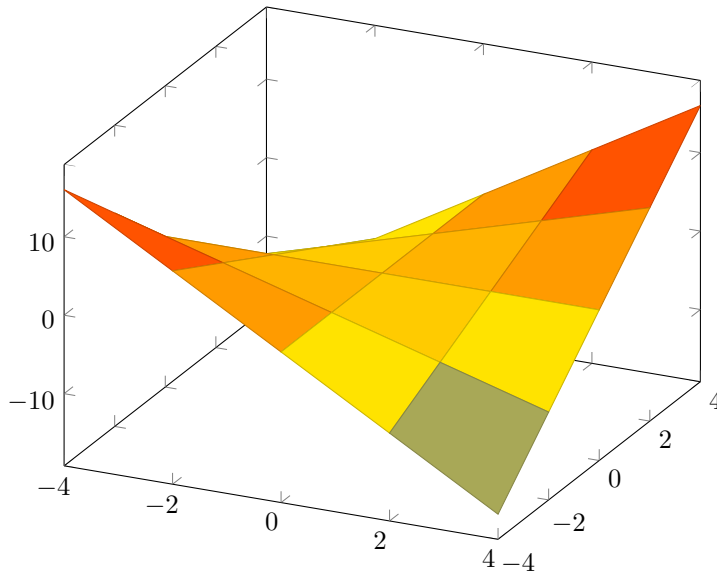


Unequal Axis

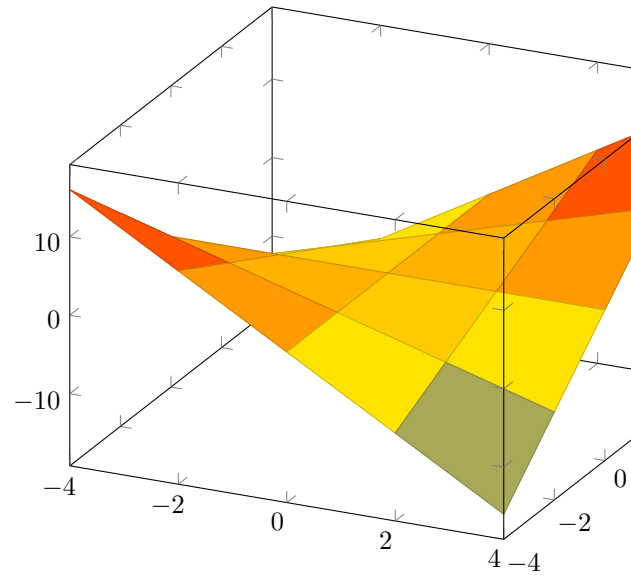
Equal Axis



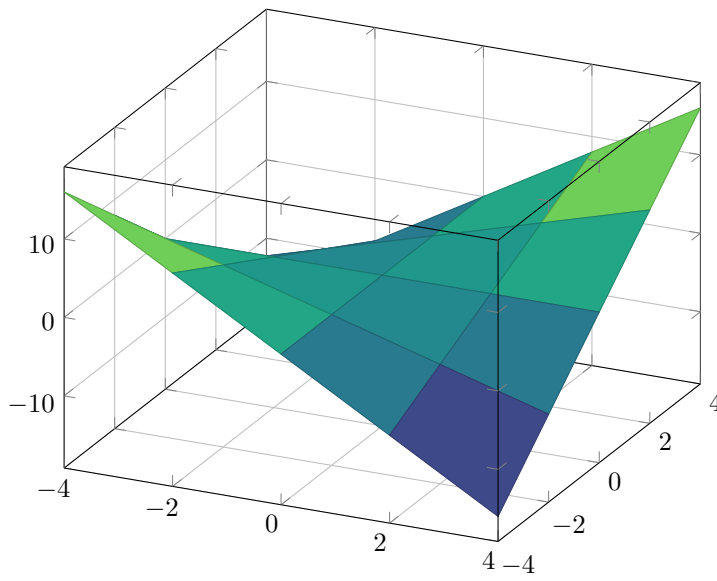
3d box=background



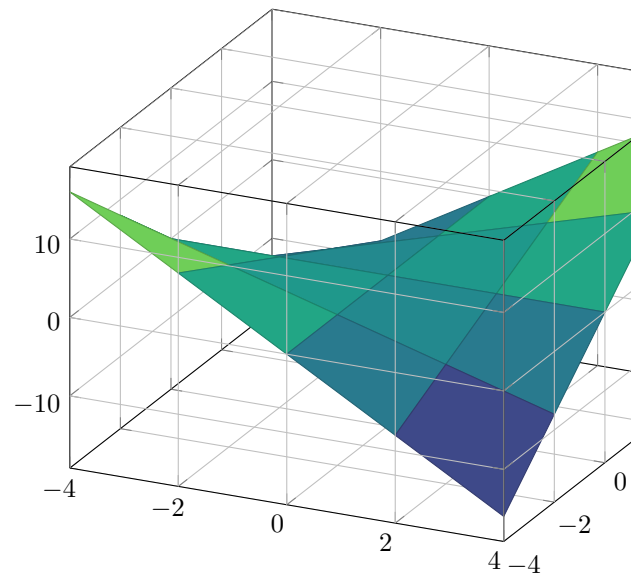
3d box=background

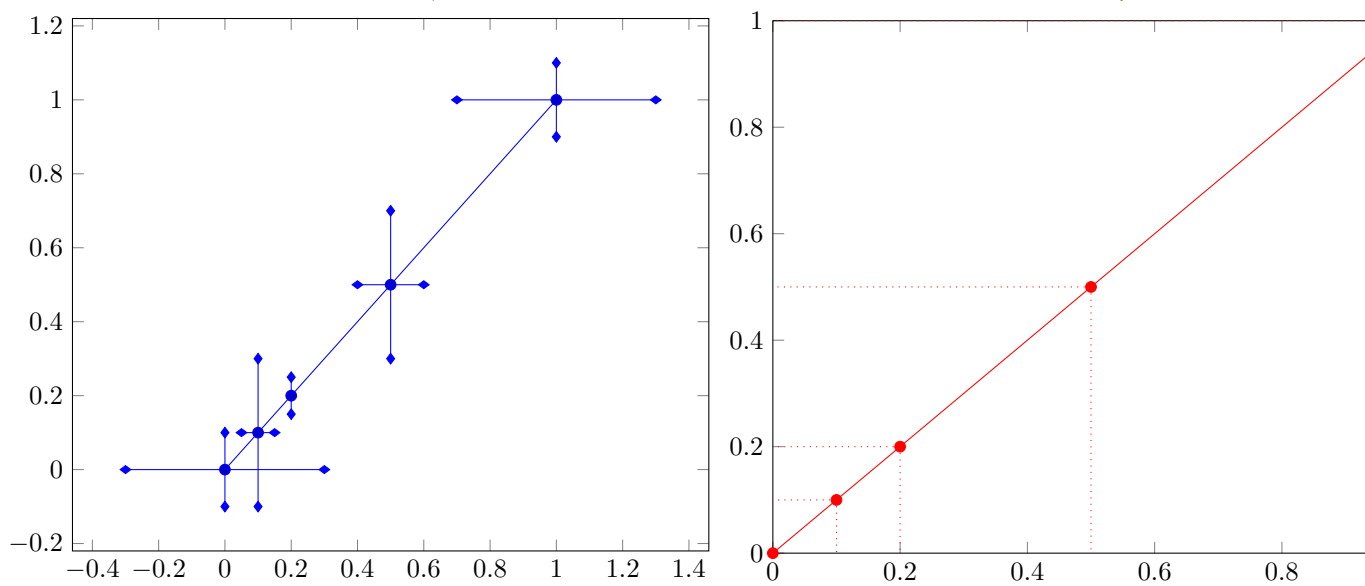
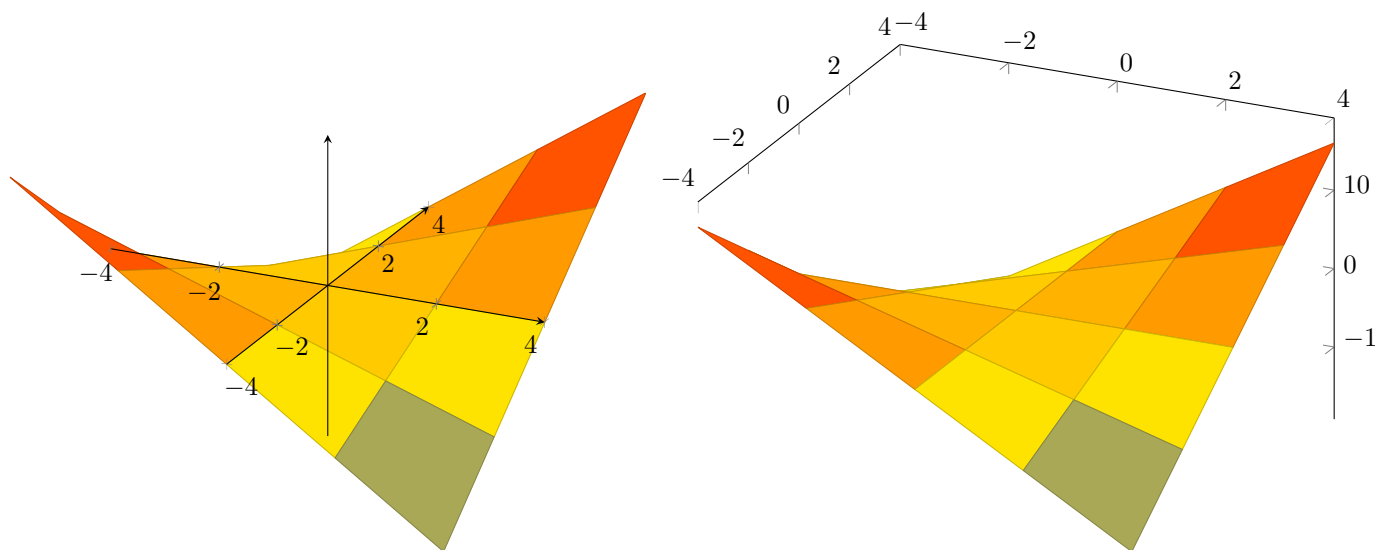


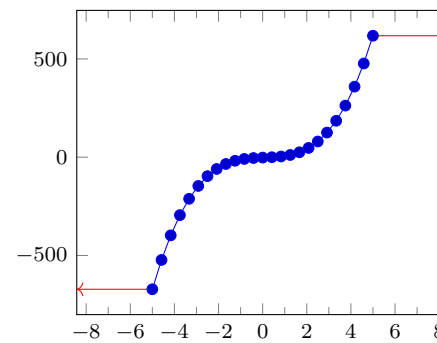
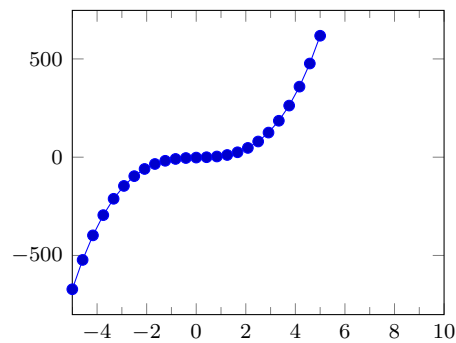
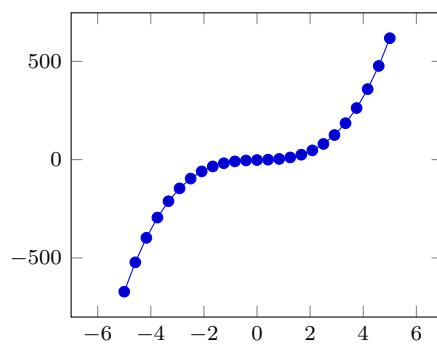
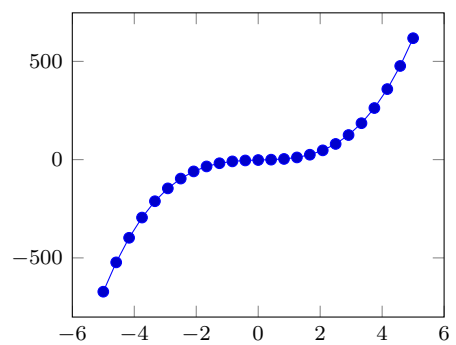
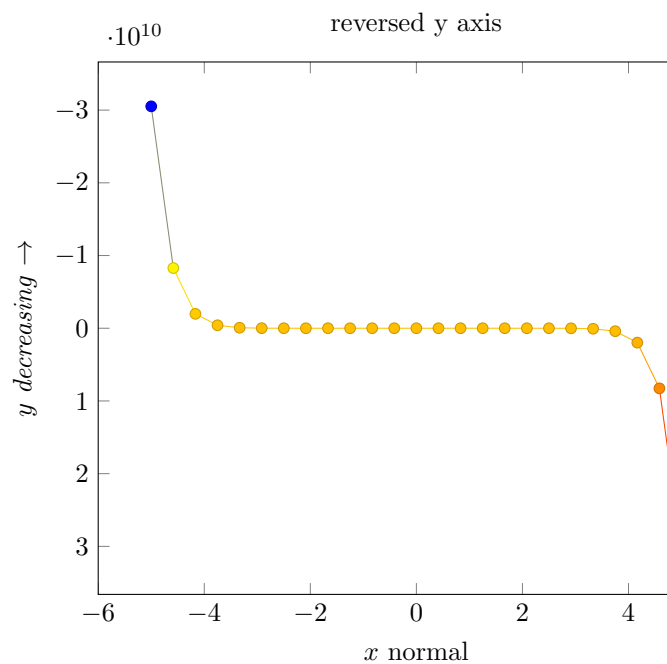
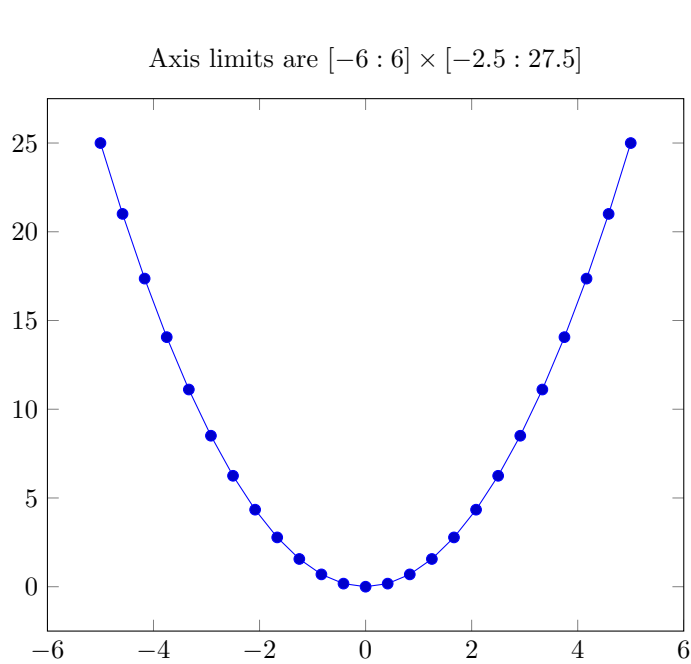
3d box=background

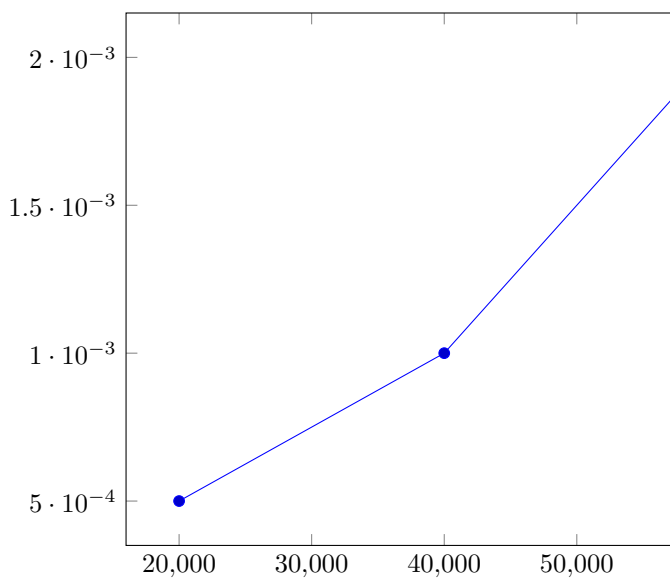
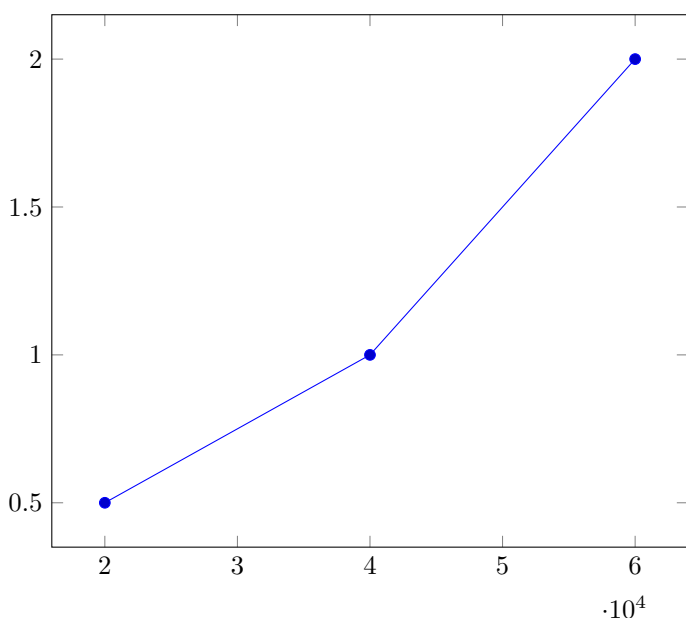
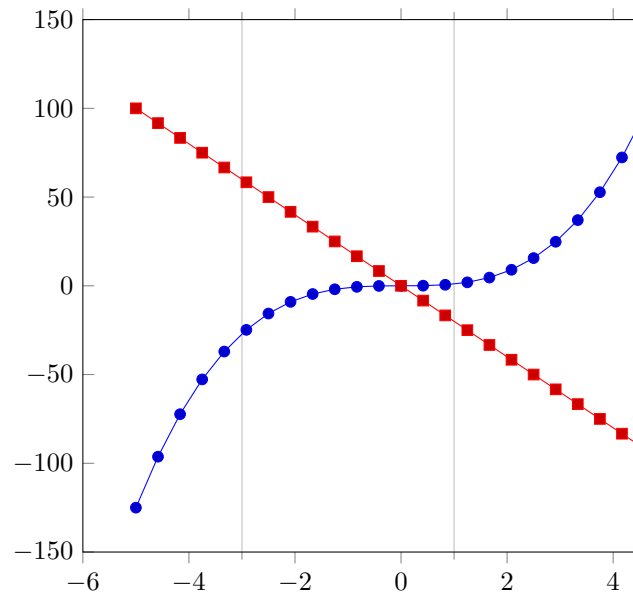
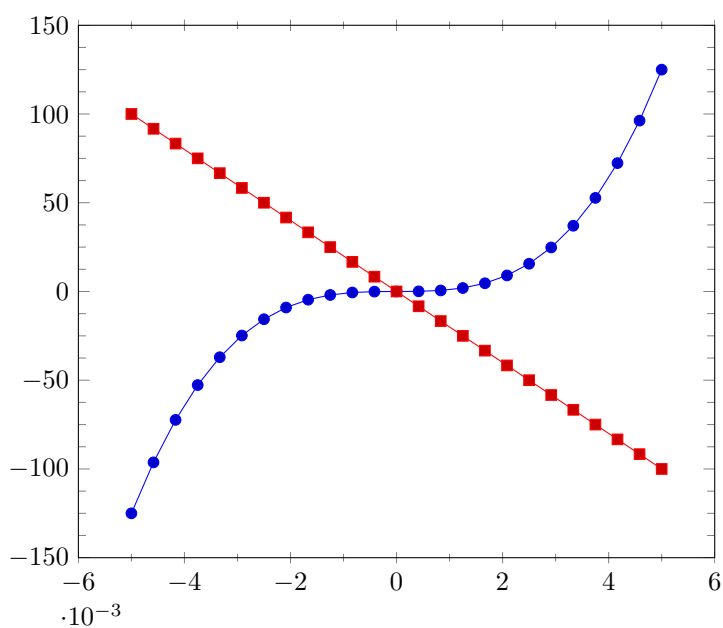


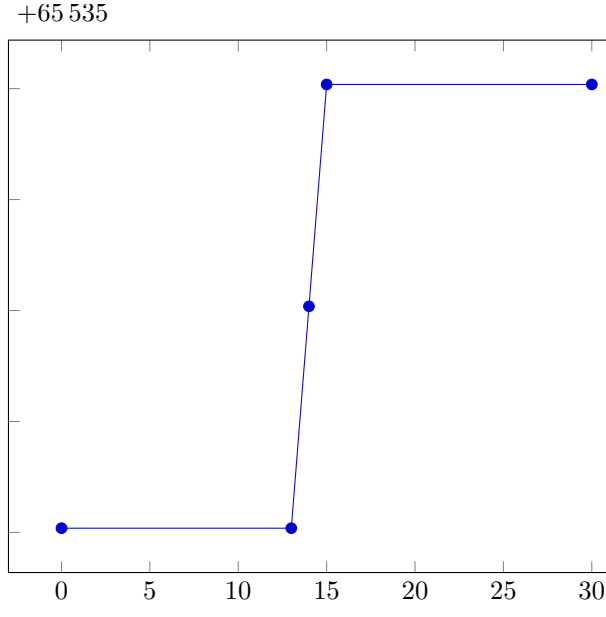
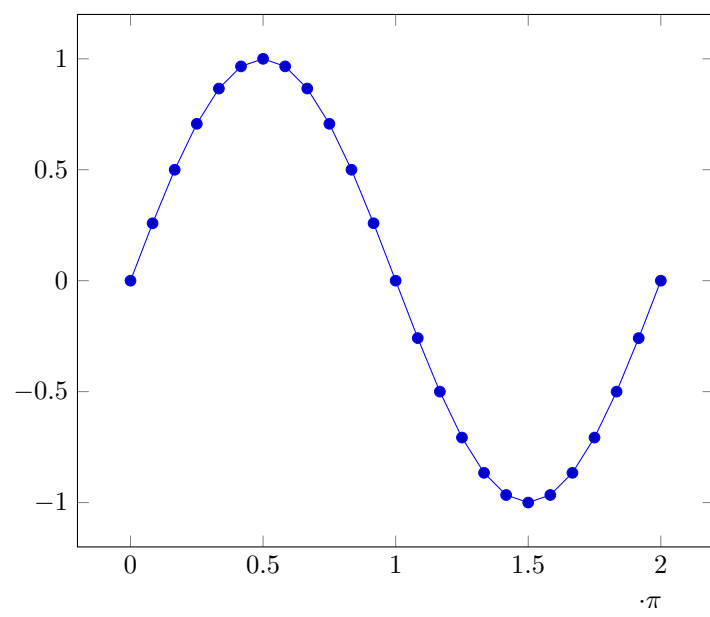
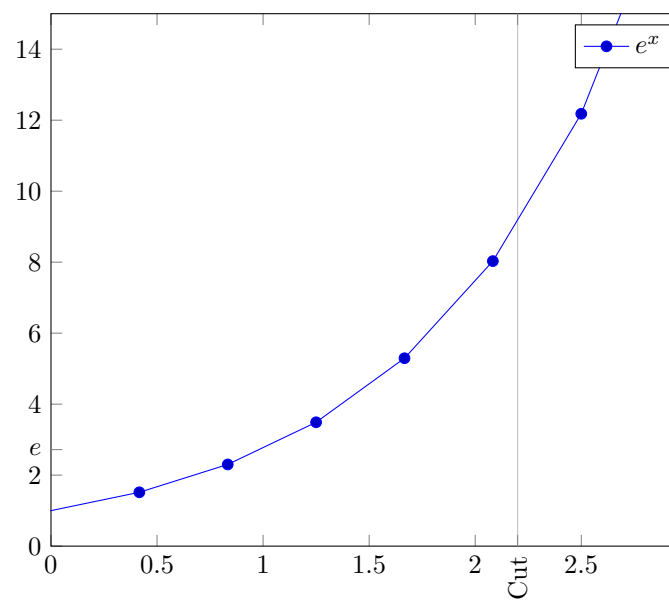
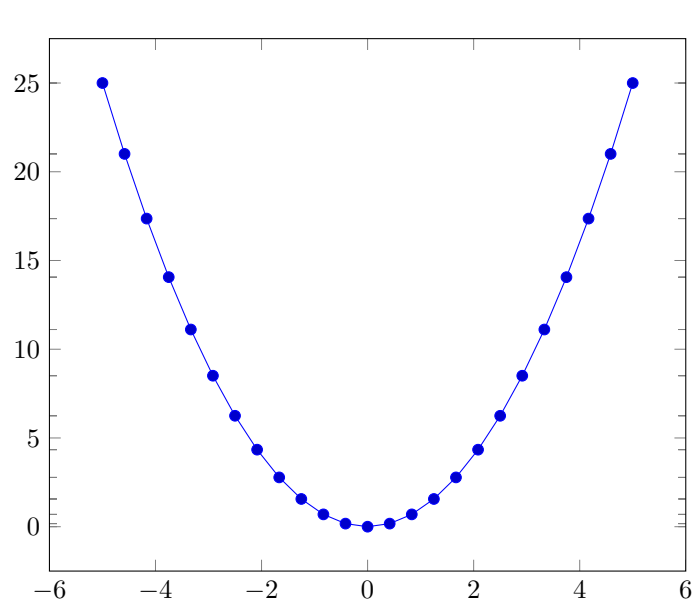
3d box=background

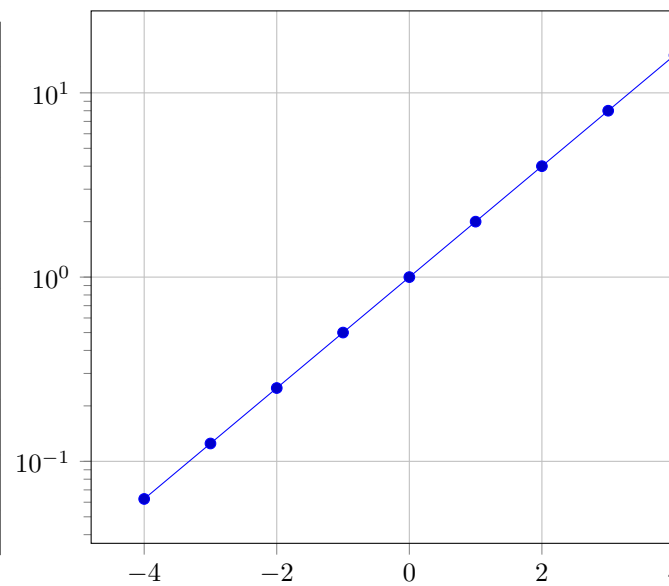
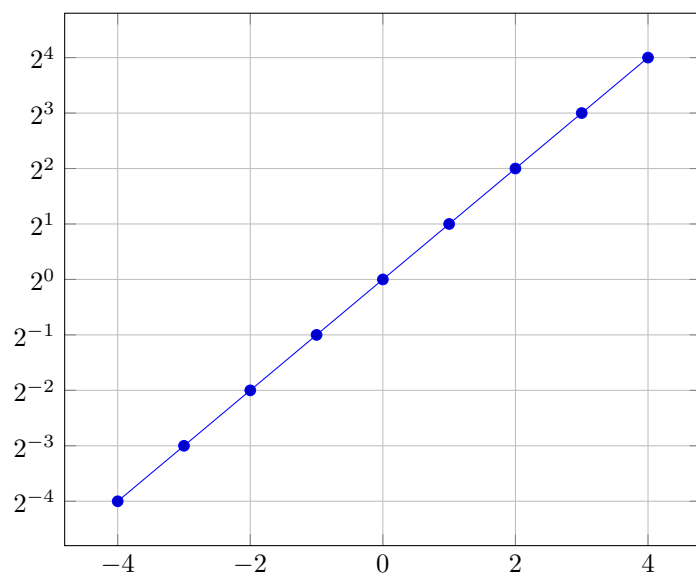
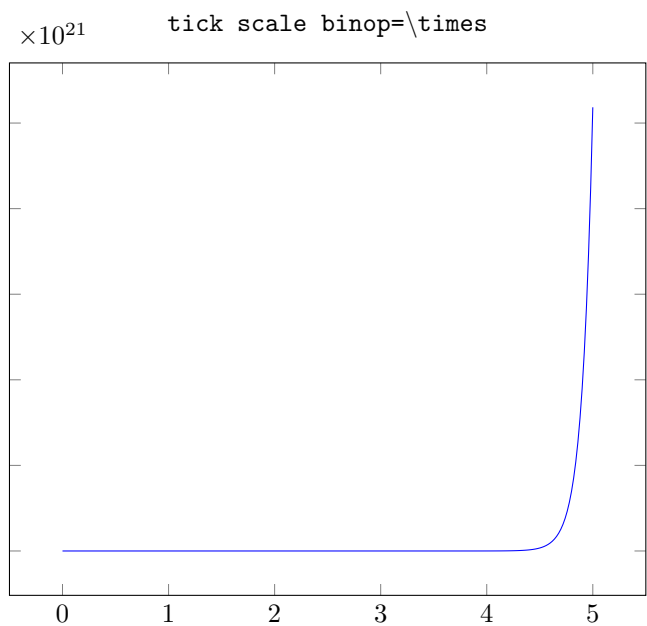
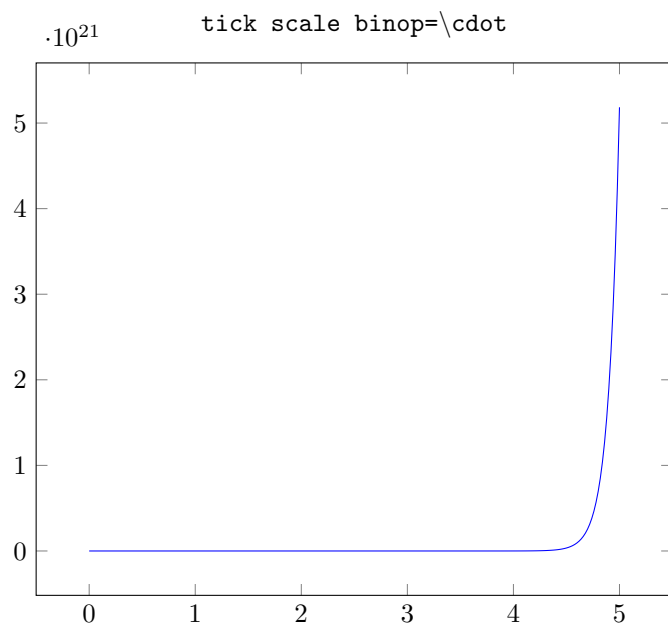


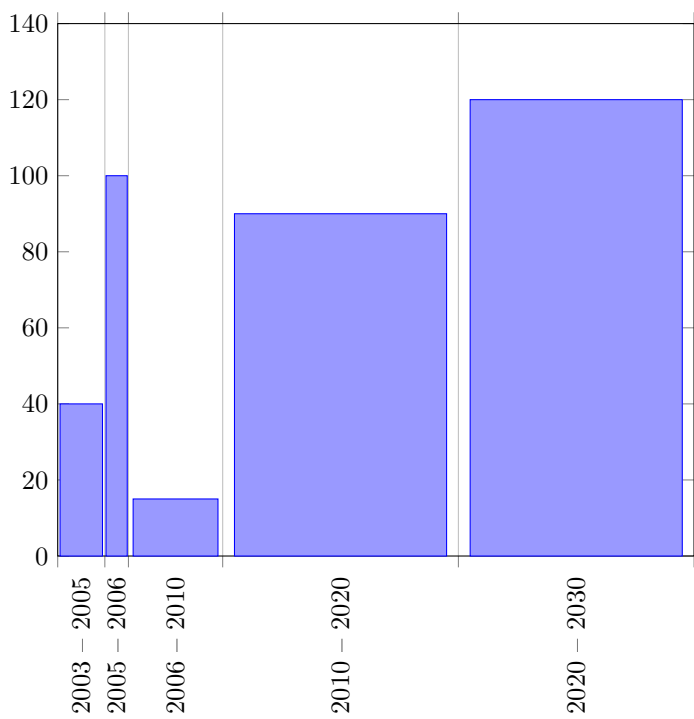
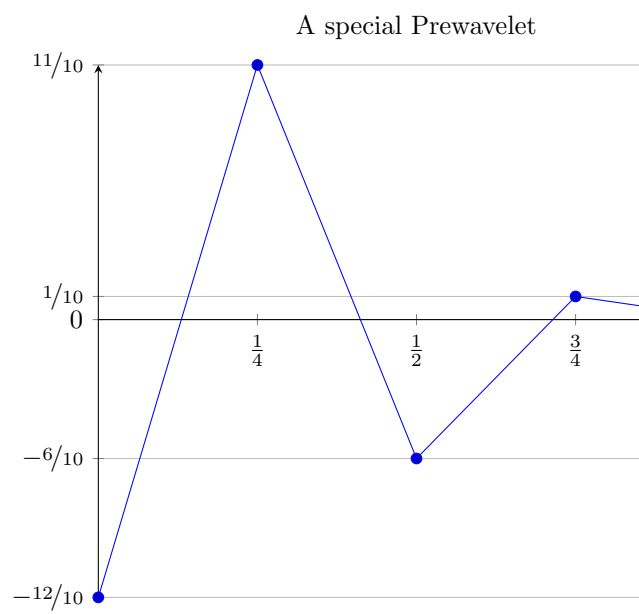
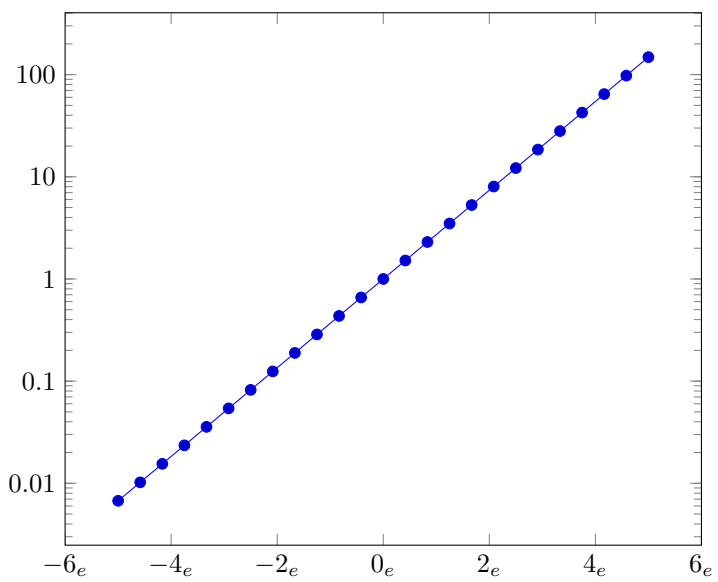


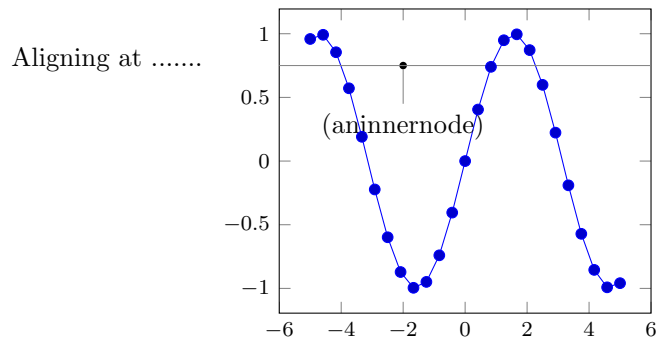
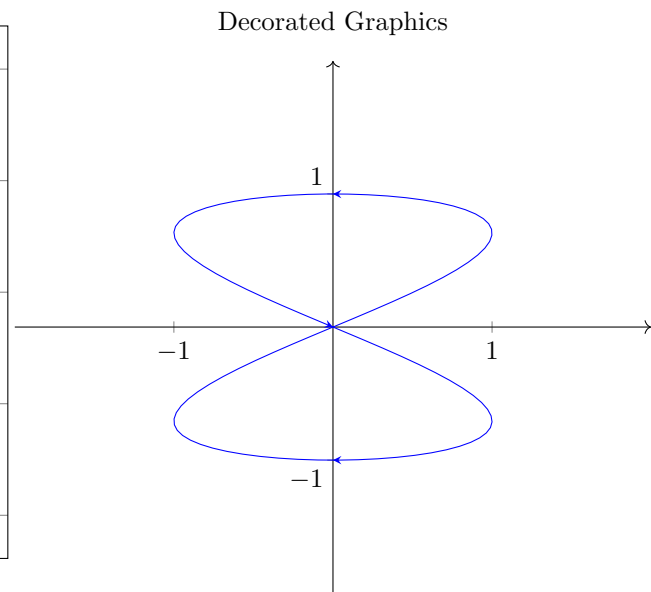
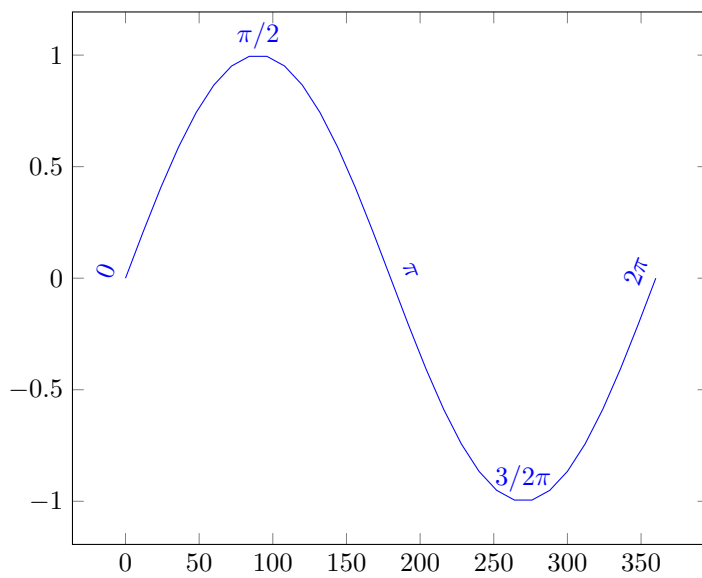
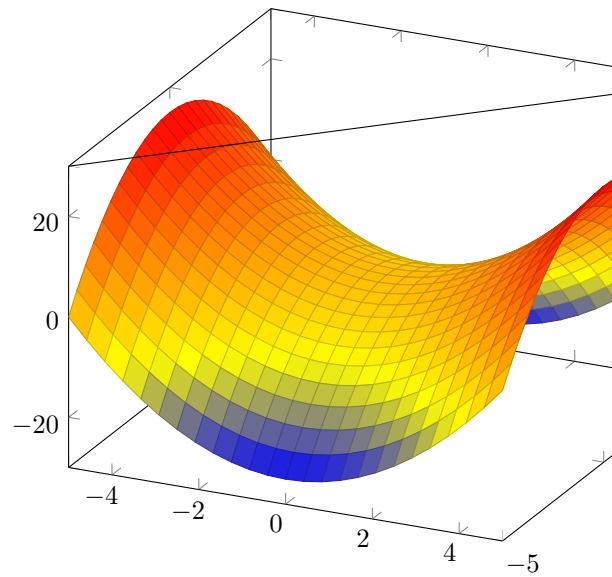
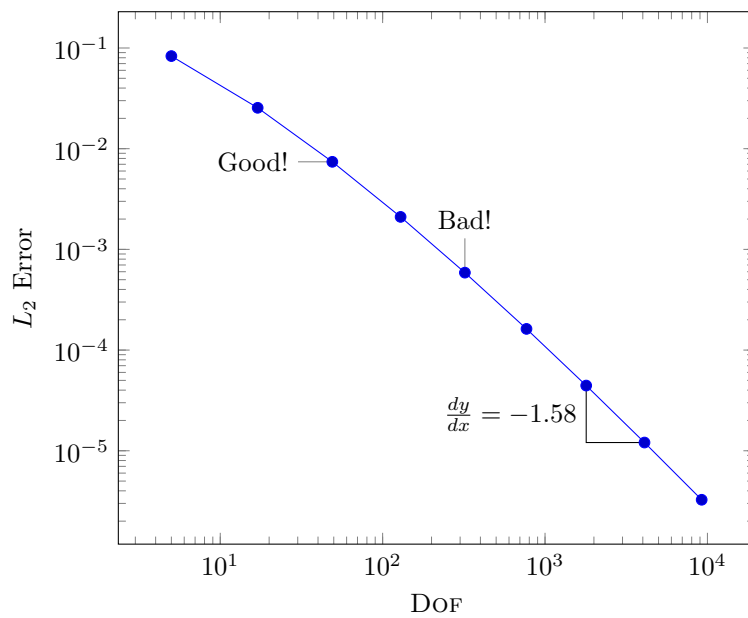




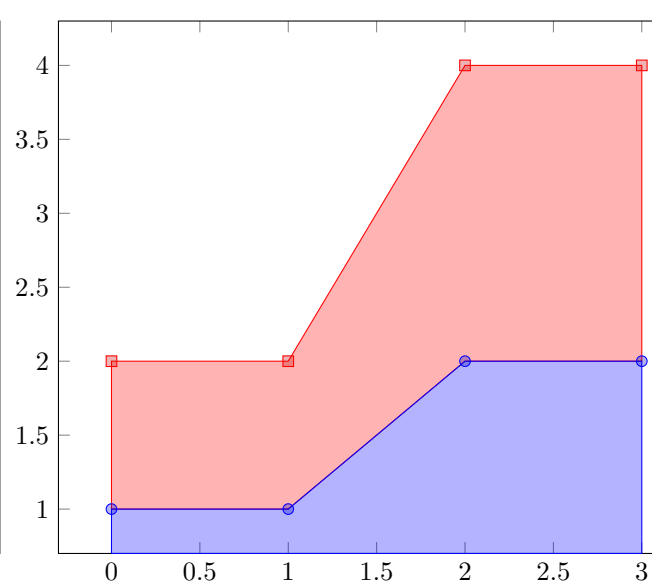
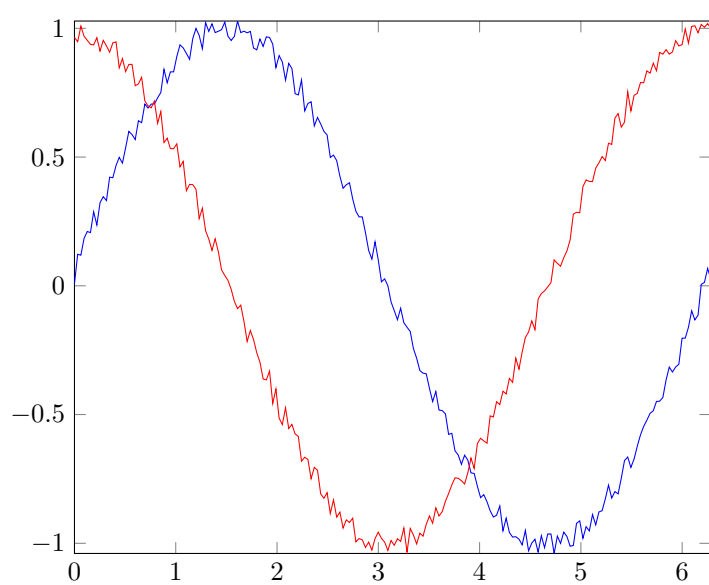
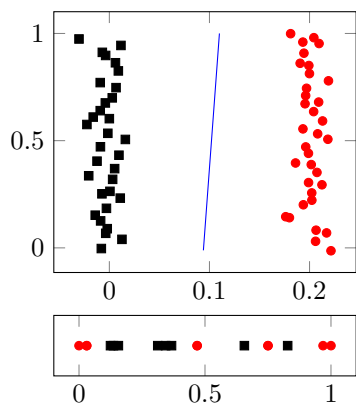
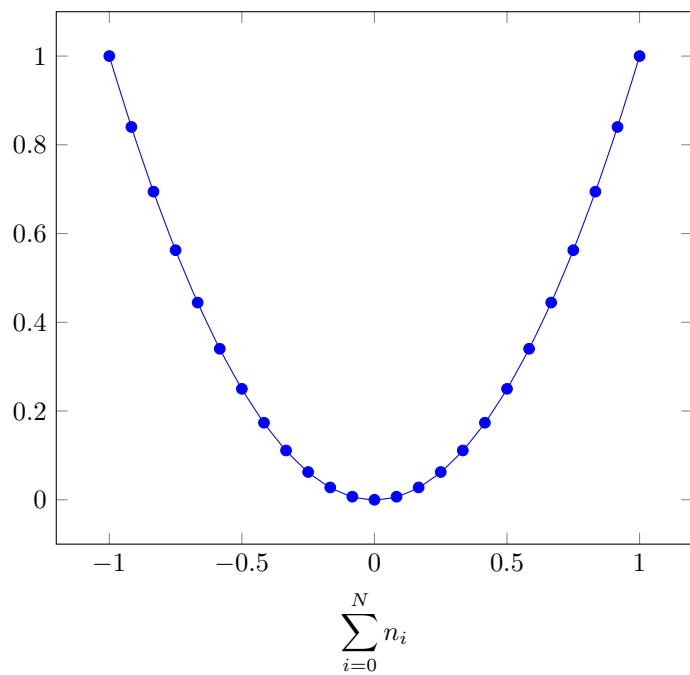
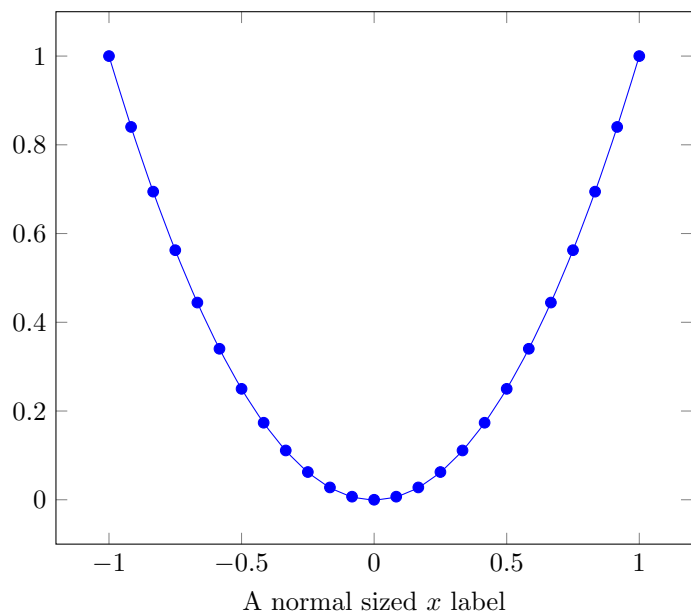


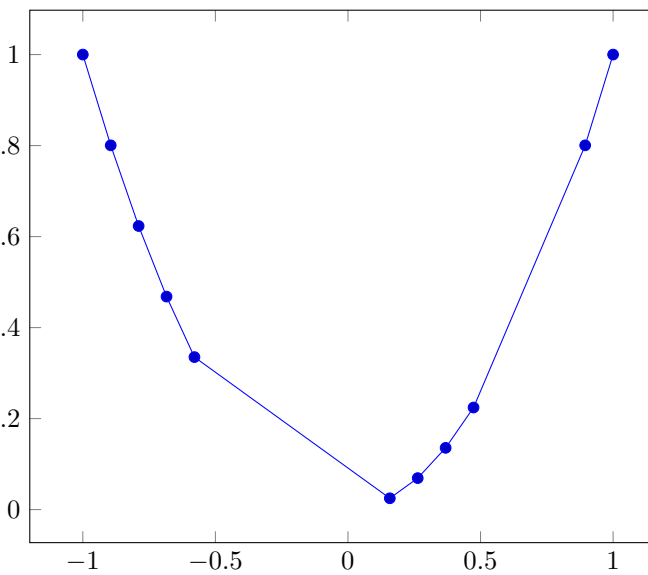
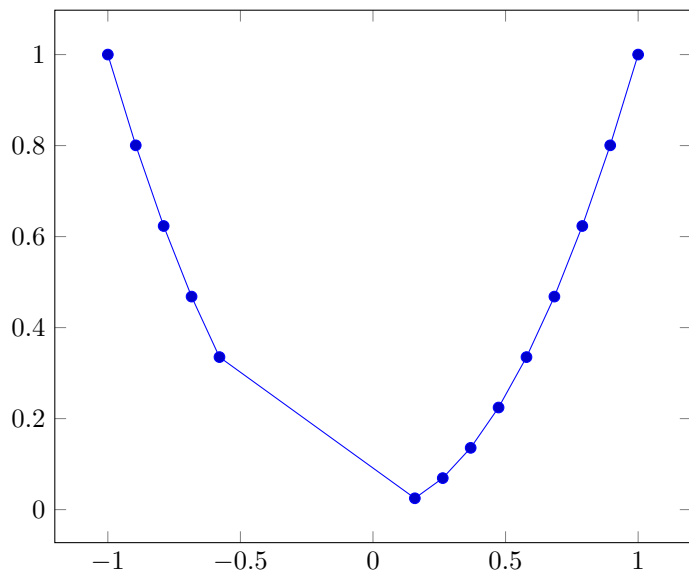
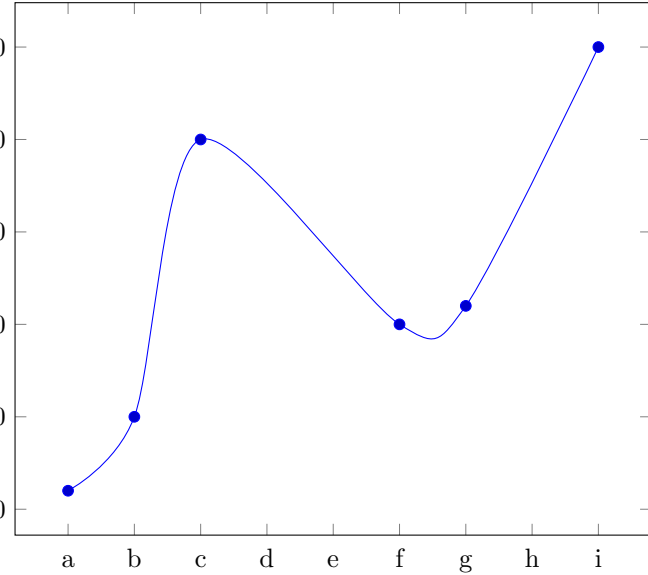
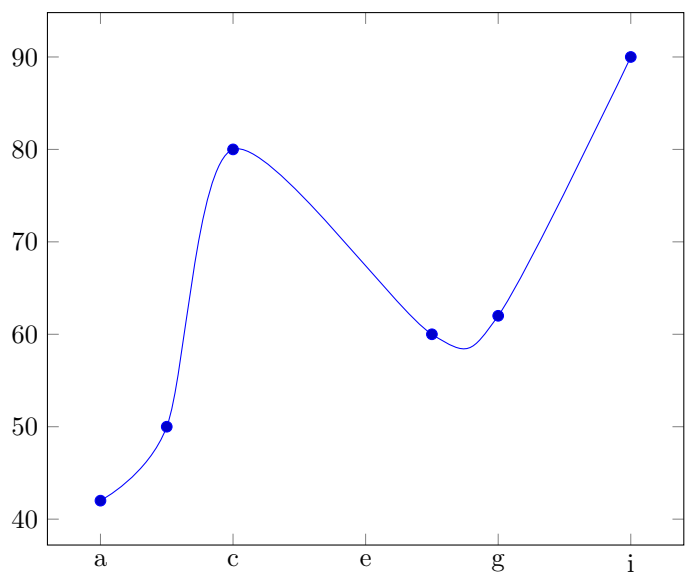
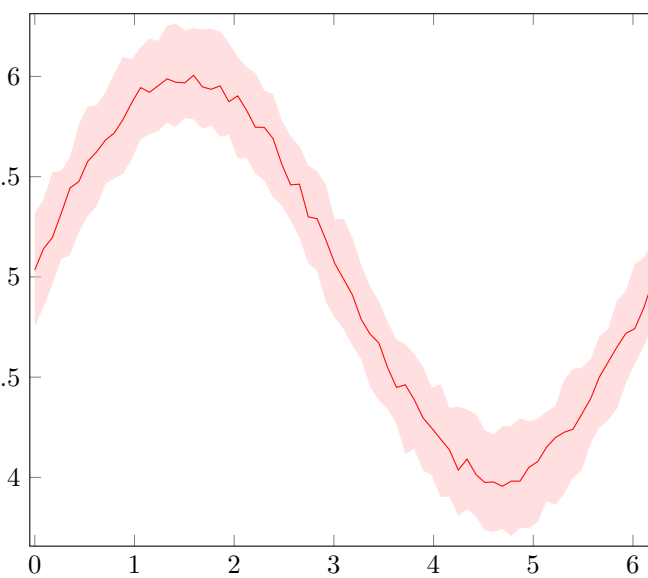
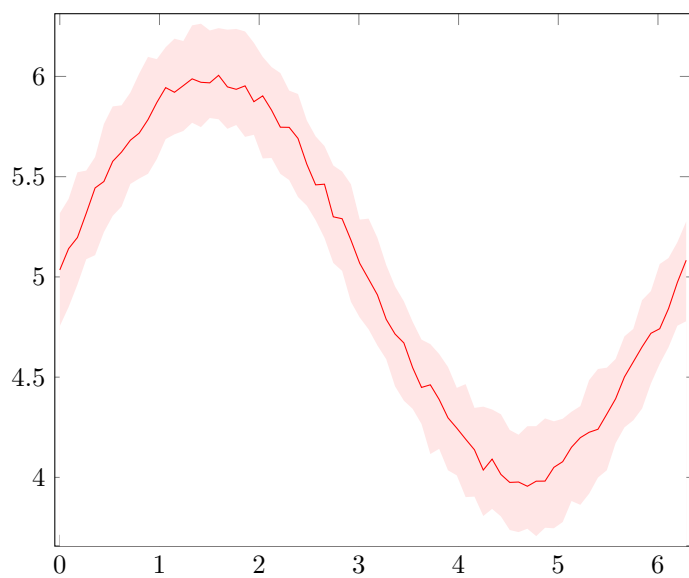


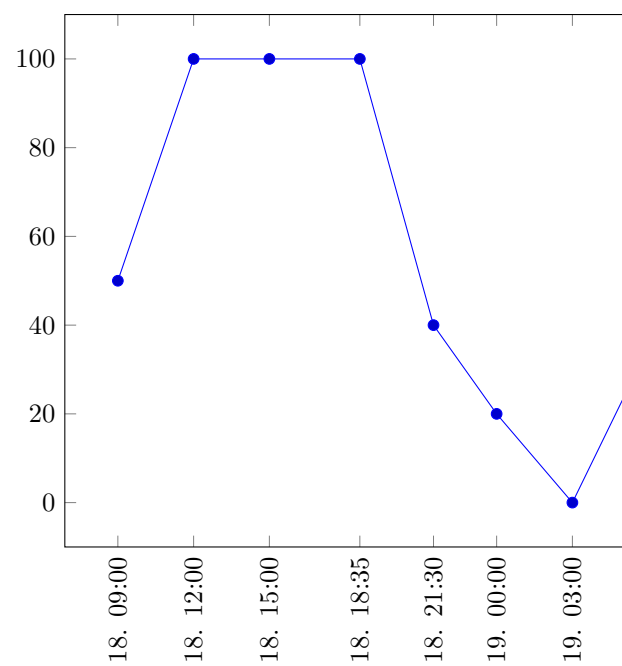
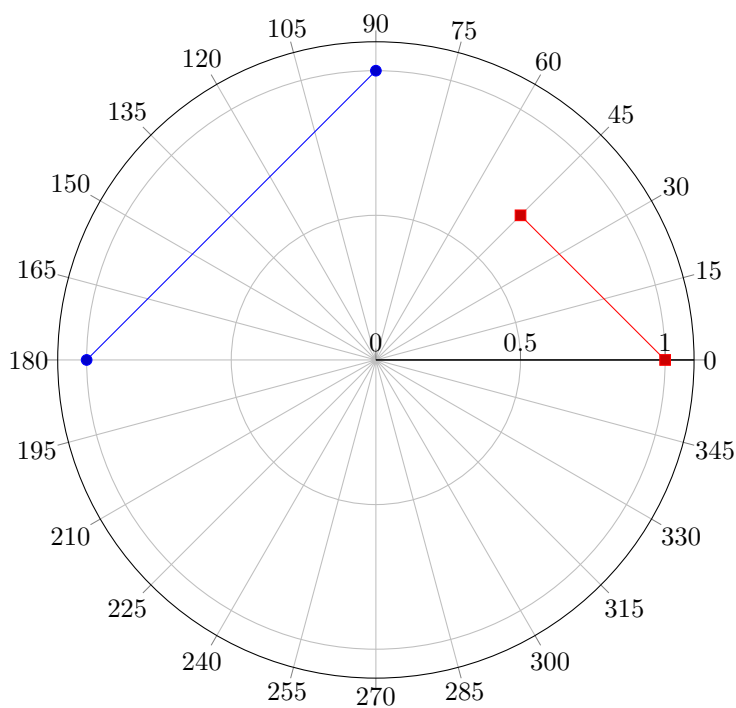
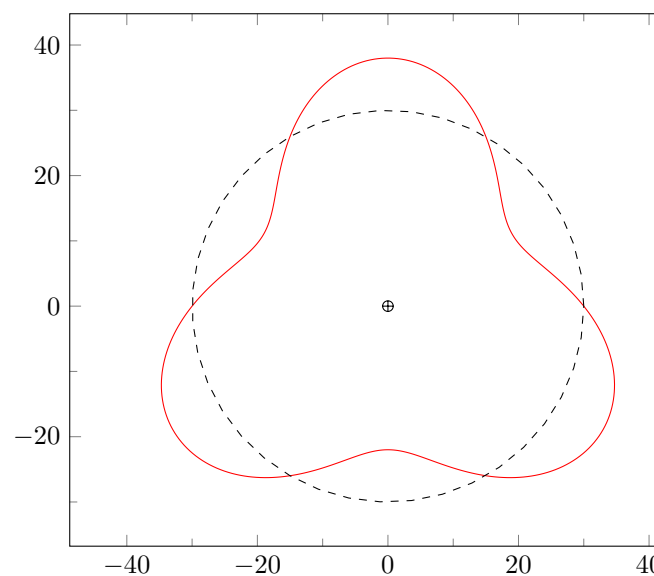
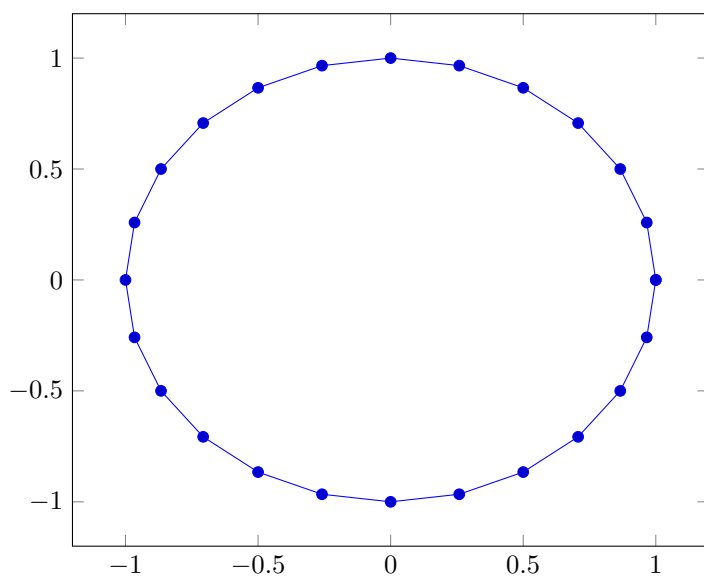




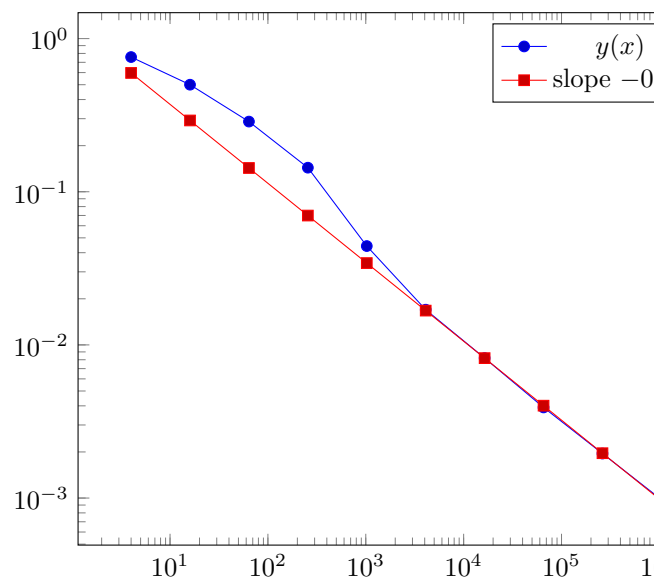
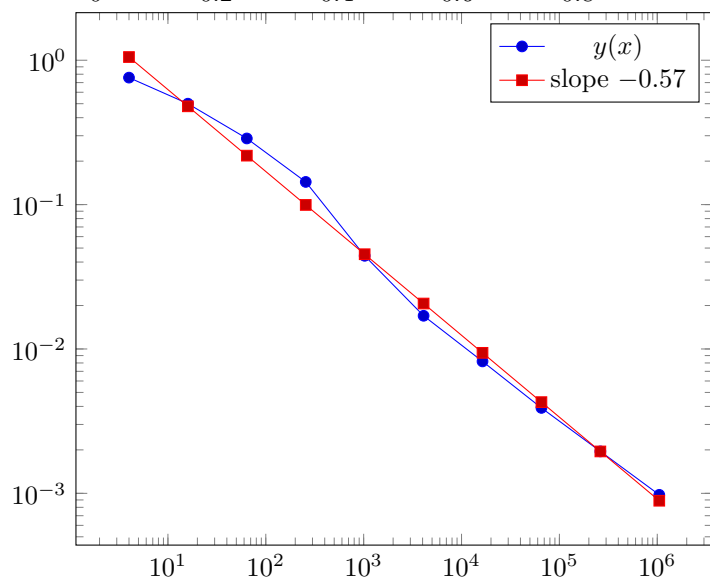
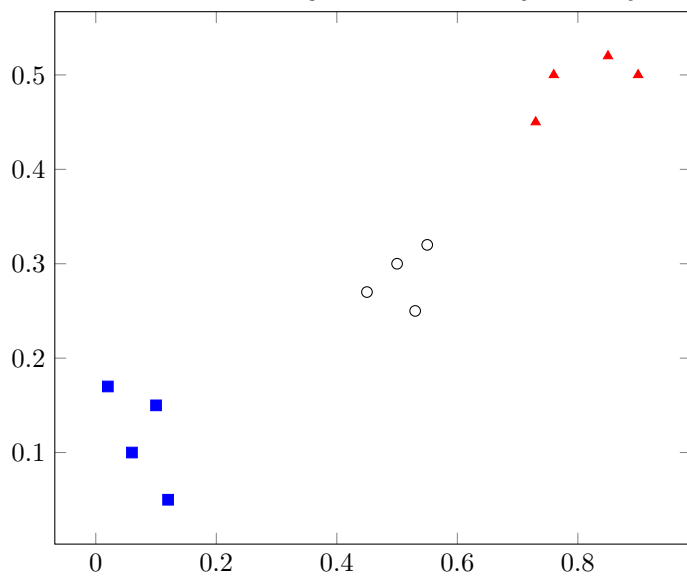
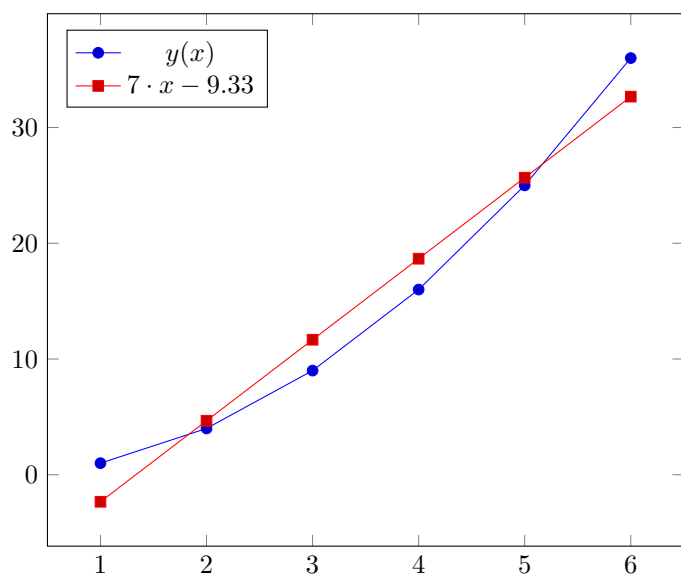
This is ● a picture, here ● another one.
Aligning top edge of graphs:

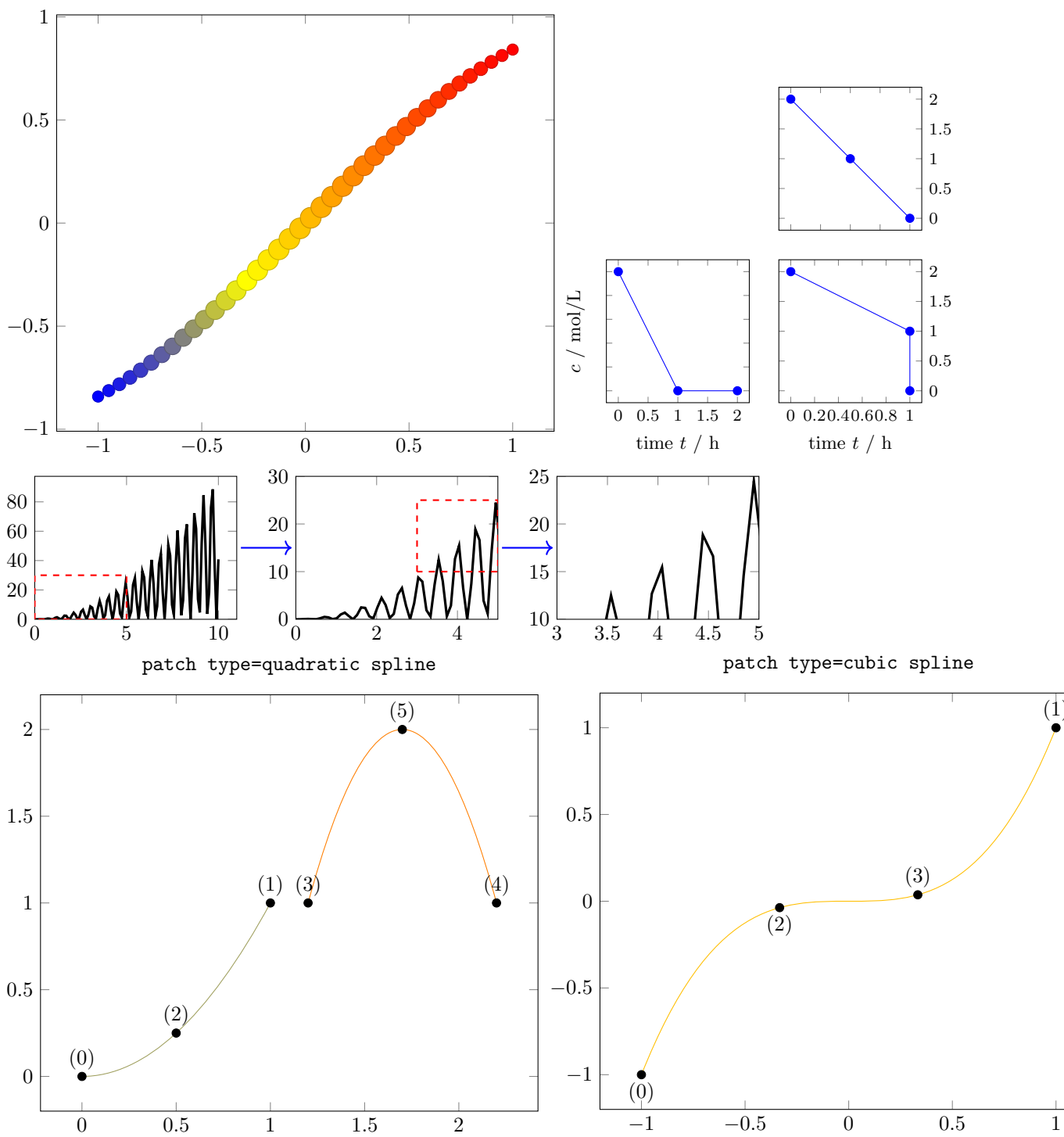




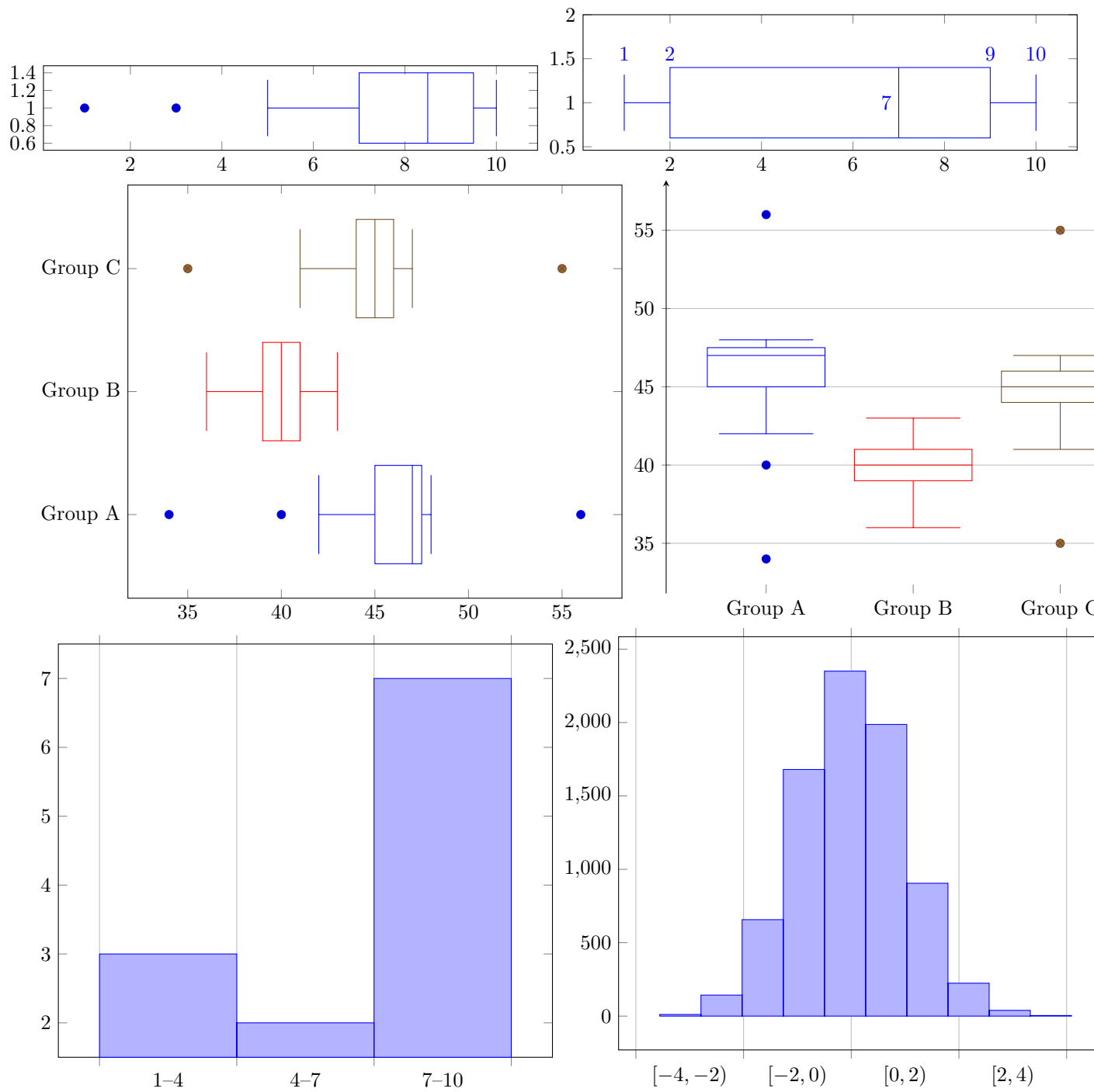


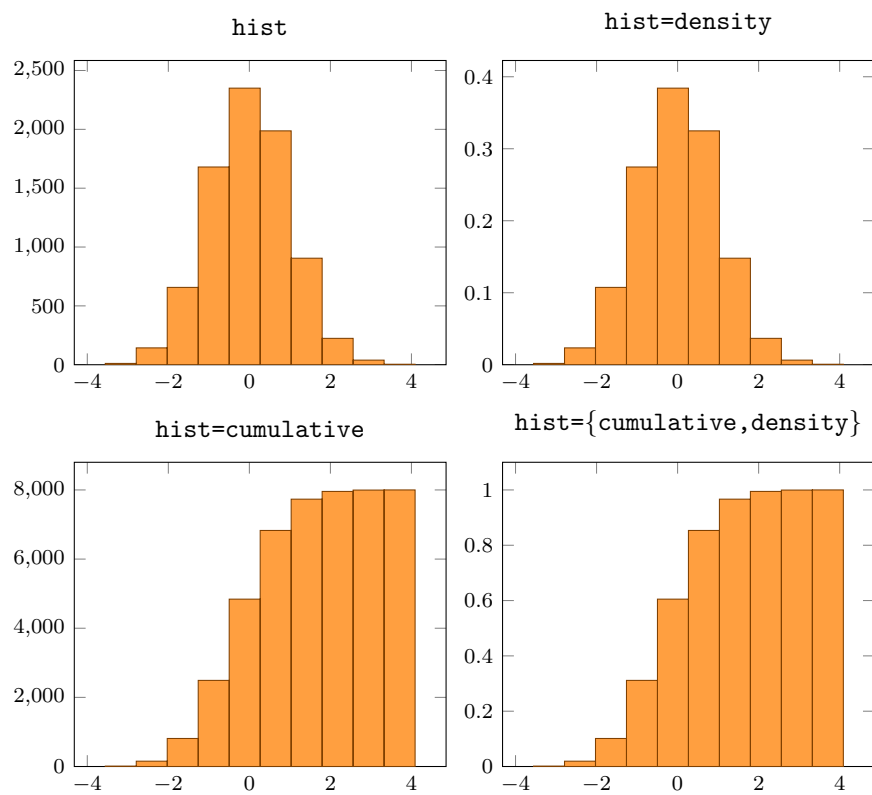
Attention: If you intend to use hours and minutes, you should always provide the date ZERO to maintain adequate precision!





1.22 Statistics





1.23 title

